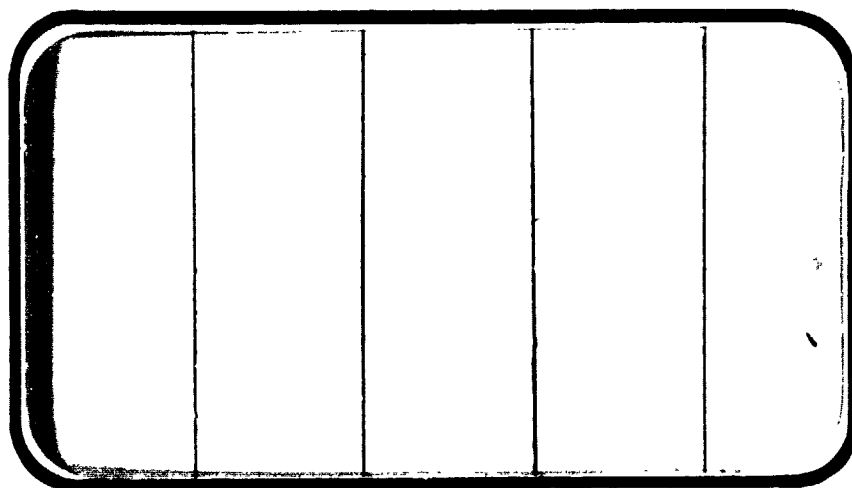


NASA

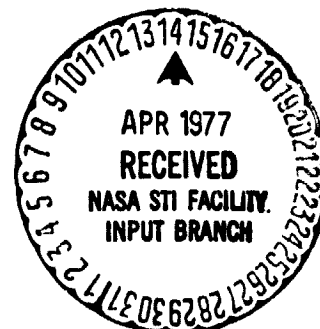
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION



(NASA-CR-151061) TRANSONIC CONTROL
EFFECTIVENESS FOR FULL AND PARTIAL SPAN HC A10/MF A01
ELEVON CONFIGURATIONS ON A 0.0165 SCALE
MODEL SPACE SHUTTLE ORBITER TESTED IN THE
LARC 8-FOOT TRANSONIC WIND TUNNEL (Chrysler G3/16 22841
N77-20146
Unclas

SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT



JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA Management services

SPACE DIVISION



**CHRYSLER
CORPORATION**

March 1977

DMS-DR-2184
NASA CR-151,061 .

TRANSONIC CONTROL EFFECTIVENESS FOR FULL AND
PARTIAL SPAN ELEVON CONFIGURATIONS ON A 0.0165
SCALE MODEL SPACE SHUTTLE ORBITER TESTED IN THE
LaRC 8-FOOT TRANSONIC PRESSURE TUNNEL (LA48)

Prepared under NASA Contract Number NAS9-13247

by

Data Management Services
Chrysler Corporation Michoud Defense-Space Division
New Orleans, La. 70189

for

Engineering Analysis Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Numbers: LARC 8' TPT 680
NASA Series Numbers: LA48
Model Number: 089B-139
Test Dates: April 10 through 15, 1974
Occupancy Hours: 48

FACILITY COORDINATOR:

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Chrysler Corporation Michoud Defense-Space Division assumes no responsibility for the data presented other than display characteristics.

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TRANSONIC CONTROL EFFECTIVENESS FOR FULL AND
PARTIAL SPAN ELEVON CONFIGURATIONS ON A 0.0165
SCALE MODEL SPACE SHUTTLE ORBITER TESTED IN THE
LARC 8-FOOT TRANSONIC PRESSURE TUNNEL (LA48)

ABSTRACT

An experimental investigation has been conducted in the NASA-Langley Research Center 8-Foot Transonic Pressure Tunnel on an early version of the space shuttle orbiter (designated O89B-139) 0.0165 scale model to systematically determine both longitudinal and lateral control effectiveness associated with various combinations of inboard, outboard, and full span wing trailing edge controls. This report presents results from transonic investigations conducted from April 10 through 15, 1974. The test was conducted over a Mach number range from 0.6 to 1.08 at angles of attack from -2° to 23° at 0° sideslip.

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12	OUTBOARD AILERON ROLL CONTROL EFFECTIVENESS (INBOARD ELEVON DEFLECTED)	(E)	ALPHA	1-1-57
13	OUTBOARD AILERON ROLL CONTROL EFFECTIVENESS (FULL SPAN ELEVON DEFLECTED)	(E)	AILERON	1-1-57
14	COMPARISON OF CONTROL EFFECTIVENESS FOR FULL SPAN AND INBD. ELEVON	(G)	ELEVON	1-1-57

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INDEX OF DATA FIGURES (Concluded)

SCHEDULE OF COEFFICIENTS:

- (A): CL , CLM , CD , L/D versus α
- (B): CLM , $DCLMDE$, DCL/DE , DCD/DE versus α
- (C): $DCLMDE$, DCL/DE , DCD/DE versus α
- (D): CY , CYN , CBL versus α
- (E): CBL , CYN , CY versus $ELV-LO$ and $DCBLDA$,
 $DCYNDA$, DCY/DA versus α
- (F): $DCBLDA$, $DCYNDA$, DCY/DA versus α
- (G): $DCMIDE$, $DCLMDE$, $DCMI/F$ versus $MACH$

NOMENCLATURE
General

<u>SYMBOL</u>	<u>MEMORIC</u>	<u>DEFINITION</u>
a		speed of sound; m/sec, ft/sec
C _p	CP	pressure coefficient; $(p_1 - p_\infty)/q$
M	MACH	Mach number; V/a
p		pressure; N/m ² , psf
q	Q(NSM) Q(PSF)	dynamic pressure; $1/2\rho V^2$, N/m ² , psf
RN/L	RN/L	unit Reynolds number; per m, per ft
V		velocity; m/sec, ft/sec
α	ALPHA	angle of attack, degrees
β	BETA	angle of sideslip, degrees
ψ	PSI	angle of yaw, degrees
ϕ	PHI	angle of roll, degrees
ρ		mass density; kg/m ³ , slugs/ft ³

Reference & C.G. Definitions

A _b		base area; m ² , ft ²
b	BREF	wing span or reference span; m, ft
b/2		wing semi-span
c.g.		center of gravity
$\frac{l_{REF}}{c}$	LREF	reference length or wing mean aerodynamic chord; m, ft
S	SREF	wing area or reference area; m ² , ft ²
	MRP	moment reference point
	XMRP	moment reference point on X axis
	YMRP	moment reference point on Y axis
	ZMRP	moment reference point on Z axis

SUBSCRIPTS

b	base
l	local
s	static conditions
t	total conditions
∞	free stream

NOVENCLATURE (Continued)

Body-Axis System

<u>SYMBOL</u>	<u>MEMONIC</u>	<u>DEFINITION</u>
C_N	CN	normal-force coefficient; $\frac{\text{normal force}}{qS}$
C_A	CA	axial-force coefficient; $\frac{\text{axial force}}{qS}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_{A_b}	CAB	base-force coefficient; $\frac{\text{base force}}{qS}$ $-A_b(p_b - p_\infty)/qS$
C_{A_f}	CAF	forebody axial force coefficient, $C_A - C_{A_b}$
C_m	CIM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS l_{REF}}$
C_n	CYN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qS b}$
C_l	CBL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qS b}$

Stability-Axis System

C_L	CL	lift coefficient; $\frac{\text{lift}}{qS}$
C_D	CD	drag coefficient; $\frac{\text{drag}}{qS}$
C_{D_b}	CDB	base-drag coefficient; $\frac{\text{base drag}}{qS}$
C_{D_f}	CDF	forebody drag coefficient; $C_D - C_{D_b}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS l_{REF}}$
C_n	CLN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qS b}$
C_l	CSL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qS b}$
L/D	L/D	lift-to-drag ratio; C_L/C_D
L/D_f	L/DF	lift to forebody drag ratio; C_L/C_{D_f}
δ_{SB}	SPDBRK	speed brake deflection angle, deg.

NOTATION (Concluded)

<u>SYMBOL</u>	<u>ABBREVIATION</u>	<u>DEFINITION</u>
$C_{D\delta_e}$	DCD/DE	Slope of drag coefficient vs. elevator deflection curve; $dC_D/d\delta_e$, per degree
$C_{L\delta_e}$	DCL/DE	Slope of lift coefficient vs. elevator deflection curve; $dC_L/d\delta_e$, per degree
$C_{L\delta_a}$	DCRLDA	Slope of rolling moment coefficient vs. aileron deflection curve, $dC_{Lr}/d\delta_a$, per degree
$C_{m\delta_e}$	DCMIDE	Slope of pitching moment coefficient vs. elevator deflection curve, $dC_m/d\delta_e$, per degree
$C_{Y\delta_a}$	DCY/DA	Slope of side force coefficient vs. aileron deflection curve, $dC_Y/d\delta_a$, per degree
$C_{n\delta_a}$	DCYRDA	Slope of yawing moment coefficient vs. aileron deflection curve, $dC_{Yr}/d\delta_a$, per degree
δ_a	AILTRON	Aileron deflection angle; elevator deflection for roll control, $(\delta_{eL} - \delta_{eR})/2$, positive deflection left panel trailing edge down
δ_e	ELEVTR	Elevator deflection angle; elevator deflection for pitch control $(\delta_{eL} + \delta_{eR})/2$, positive deflection trailing edge down
δ_{eLo}	ELV-LO	Left outboard elevator panel deflection, degrees
δ_{eLi}	ELV-LI	Left inboard elevator panel deflection, degrees
δ_{eRi}	ELV-RI	Right inboard elevator panel deflection, degrees
δ_{eRo}	ELV-RO	Right outboard elevator panel deflection, degrees
$C_{m\delta_{eI}}$	DCMIDE	Slope of pitching moment coefficient versus inboard elevator deflection curve, per degree
	DCMI/F	Ratio of the slopes of the inboard elevator pitching moment curve over the full span elevator pitching moment curve
δ_{BF}	BDFLAP	body flap deflection angle, deg.

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INTRODUCTION

A continuing effort to identify the most suitable space shuttle concept, a joint study between Langley Research Center, Johnson Space Center, and Rockwell International has been undertaken to determine if the in-board operation of the four elevator surfaces of the orbiter could result in a more efficient use of available control power, reduced elevator deflections, and associated aerodynamic wing bending, to allow a more flexible flight profile without adverse control characteristics.

Therefore, an experimental investigation at subsonic and supersonic speeds was initiated at Langley to systematically determine both longitudinal and lateral control effectiveness associated with various configurations of inboard, outboard, and full span wing trailing edge controls for a shuttle orbiter configuration. Due to the unavailability of a current vehicle configuration, the model employed in this study was a 0.0157 scale earlier version of the orbiter designated by Rockwell International as configuration OGB-120. The differences between this configuration and the current design (vehicle 5) were not felt to be sufficient to alter the incremental effectiveness presented herein. This report presents the transonic results obtained in the overall study. Utilizing the Langley 8-Foot Transonic Pressure Tunnel, the Mach number range of the investigation was 0.60 to 1.03. Angle of attack was varied from about -4° to as much as 23° at 0° of sideslip. Supersonic results are presented in the reference.

CONFIGURATIONS INVESTIGATED

The configuration tested was a 0.0165 scale model of a blend of Rockwell International shuttle configurations consisting of a 089B configuration with a 139B configuration nose forward of fuselage station 500. A sketch and photographs of the model are shown in figures 2 and 3, respectively. Body base flap was fixed at 0° deflection.

Elevon controls were split at 0.60 b/2 giving the inboard and outboard segments approximately 53 percent and 47 percent of the total elevon area, respectively. The surfaces could be deflected in unison or as individual panels. Maximum range of deflection for each panel was from 0° to -40° . Combinations tested included: for pitch control, inboards only, outboards only and full span; for roll control, outboards only with full span and inboard deflected for pitch control.

To expedite testing, the elevons were remotely controlled by four internal electric motors (see fig. 2c).

A complete description of model dimensional data is given in Table III.

TEST CONDITIONS

The model was sting supported, with aerodynamic forces and moments measured by an internally mounted six-component strain gage balance. Model angle of attack was varied from about -2° to as much as 23° for an angle of sideslip of 0° . Reynolds number was constant at a nominal 3.0×10^6 per foot. Angle of attack has been corrected for deflection of the sting and balance under load.

Transition strips 0.063 inch wide composed of No. 120 sand grit were located 1.0 inch aft of the apex of the fuselage and 0.5 inch (measured streamwise) aft of the wing and fillet and vertical tail leading edges.

Drag data presented herein represent gross drag in that measured drag is uncorrected for base pressure effects.

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TEST FACILITY DESCRIPTION

NASA/Langley Research Center 8-Foot Transonic Pressure Tunnel is an air-medium facility capable of attaining continuously variable Mach numbers from 0.20 to 1.30. It is a single-return, closed-circuit tunnel, having controlled stagnation temperature, total pressure, and dew-point temperature. The test section is 7.1 feet square. Reynolds numbers are variable from 0.30×10^6 per foot to 7.00×10^6 , depending on Mach number and tunnel total pressure limitations. Models are supported in the test section by a sting-sector system, but wall-mounting is possible. Schlieren photography is available for flow and shock-wave studies.

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DATA REDUCTION

Data are recorded at the facility and reduced off-line at the LARC Computation Center. Longitudinal data are referred to the stability-axis system and lateral-directional data are referred to the body-axis system. All coefficients are normalized with respect to the projected wing area (excluding the fillet), mean aerodynamic chord or span, which are:

SREF = wing projected area = 0.732 Ft.²

LREF = wing mean aerodynamic chord = 7.834 in.

BREF = wing span = 15.45 in.

All data are presented along a set of body and stability axes (Figure 1) passing through the estimated forward center of gravity located at a full scale fuselage station of 1076.48 in. or 65% of the actual body length.

Elevon and aileron derivative data were computer-generated by the Chrysler DATAMAN-SADSAC Program and represent the local slope of the coefficient vs. control deflection at each value of angle of attack.

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REFERENCE

1. DMS-DR-2182, "SUPERSONIC CONTROL EFFECTIVENESS FOR FULL AND PARTIAL SPAN ELEVON CONFIGURATIONS ON A 0.0165 SCALE MODEL SPACE SHUTTLE ORBITER TESTED IN THE LARC UNITARY PLAN WIND TUNNEL (LA49)."

TABLE I

[illegible]

TABLE II

TEST : 8-TPT-680 (LA-48)

DATE : 5/30/74

DATA SET / RUN NUMBER COLLATION SUMMARY

DATA SET IDENTIFIER	CONFIGURATION	SCHD.	PARAMETERS/VALUES				NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)									
			α	β	S_{24}	S_{25}		S_{26}	.60	.80	.85	.90	.92	.95	.98	1.08	
RH1001	0898 CREATER W/	A	0	0	0	0	0	71	61	51	41	31	21	11	1		
02	139 NOSE	T	0	-10	-10	0	0	72	62	52	42	32	22	12	2		
03	$S_{28} = 25^\circ, S_{29} = 0$	T	0	-20	-20	0	0	73	63	53	43	33	23	13	3		
04		T	0	-30	-30	0	0	74	64	54	44	34	24	14	4		
05		T	-10	-10	-10	-10	0	75	65	55	45	35	25	15	5		
06		T	-20	-20	-20	-20	0	76	66	56	46	36	26	16	6		
07		T	5	0	0	-5	0	77	67	57	47	37	27	17	7		
08		T	5	-20	-20	-5	0	78	68	58	48	38	28	18	8		
09		T	10	-20	-20	-10	0	79	69	59	49	39	29	19	9		
10		T	-15	-20	-20	-25	0	80	70	60	50	40	30	20	10		
11		T	-10	-20	-20	-30	0	96	93	92	89	88	85	84	81		
12		T	0	-10	-10	-20	0	95	94	91	90	87	86	83	82		
13		T	-10	0	0	-10	0	97									
14		T	-20	0	0	-20	0	98									
15		T	-30	0	0	-30	0	99									

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DATE : 5/30/74

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05		T	-10	-10	-10	-10	0	75	65	55	45	35	25	15	5		
06		T	-20	-20	-20	-20	0	76	66	56	46	36	26	16	6		
07		T	5	0	0	-5	0	77	67	57	47	37	27	17	7		
08		T	5	-20	-20	-5	0	78	68	58	48	38	28	18	8		
09		T	10	-20	-20	-10	0	79	69	59	49	39	29	19	9		
10		T	-15	-20	-20	-25	0	80	70	60	50	40	30	20	10		
11		T	-10	-20	-20	-30	0	96	93	92	89	88	85	84	81		
12		T	0	-10	-10	-20	0	95	94	91	90	87	86	83	82		
13		T	-10	0	0	-10	0	97									
14		T	-20	0	0	-20	0	98									
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09		T	10	-20	-20	-10	0	79	69	59	49	39	29	19	9		
10		T	-15	-20	-20	-25	0	80	70	60	50	40	30	20	10		
11		T	-10	-20	-20	-30	0	96	93	92	89	88	85	84	81		
12		T	0	-10	-10	-20	0	95	94	91	90	87	86	83	82		
13		T	-10	0	0	-10	0	97									
14		T	-20	0	0	-20	0	98									
15		T	-30	0	0	-30	0	99									

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07		T	5	0	0	-5	0	77	67	57	47	37	27	17	7		
08		T	5	-20	-20	-5	0	78	68	58	48	38	28	18	8		
09		T	10	-20	-20	-10	0	79	69	59	49	39	29	19	9		
10		T	-15	-20	-20	-25	0	80	70	60	50	40	30	20	10		
11		T	-10	-20	-20	-30	0	96	93	92	89	88	85	84	81		
12		T	0	-10	-10	-20	0	95	94	91	90	87	86	83	82		
13		T	-10	0	0	-10	0	97									
14		T	-20	0	0	-20	0	98									
15		T	-30	0	0	-30	0	99									

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06		T	-20	-20	-20	-20	0	76	66	56	46	36	26	16	6		
07		T	5	0	0	-5	0	77	67	57	47	37	27	17	7		
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09		T	10	-20	-20	-10	0	79	69	59	49	39	29	19	9		
10		T	-15	-20	-20	-25	0	80	70	60	50	40	30	20	10		
11		T	-10	-20	-20	-30	0	96	93	92	89	88	85	84	81		
12		T	0	-10	-10	-20	0	95	94	91	90	87	86	83	82		
13		T	-10	0	0	-10	0	97									
14		T	-20	0	0	-20	0	98									
15		T	-30	0	0	-30	0	99									

TEST : 8-TPT-680 (LA-48)

DATE : 5/30/74

DATA SET / RUN NUMBER COLLATION SUMMARY

DATA SET IDENTIFIER	CONFIGURATION	SCHD.	PARAMETERS/VALUES				NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)									
			α	β	S_{24}	S_{25}		S_{26}	.60	.80	.85	.90	.92	.95	.98	1.08	
RH1001	0898 CREATER W/	A	0	0	0	0	0	71	61	51	41	31	21	11	1		
02	139 NOSE	T	0	-10	-10	0	0	72	62	52	42	32	22	12	2		
03	$S_{28} = 25^\circ, S_{29} = 0$	T	0	-20	-20	0	0	73	63	53	43	33	23	13	3		
04		T	0	-30	-30	0	0	74	64	54	44	34	24	14	4		
05		T	-10	-10	-10	-10	0	75	65	55	45	35	25	15	5		
06		T	-20	-20	-20	-20	0	76	66	56	46	36	26	16	6		
07		T	5	0	0	-5	0	77	67	57	47	37	27	17	7		
08		T	5	-20	-20	-5	0	78	68	58	48	38	28	18	8		
09		T	10	-20	-20	-10	0	79	69	59	49	39	29	19	9		
10		T	-15	-20	-20	-25	0	80	70	60	50	40	30	20	10		
11		T	-10	-20	-20	-30	0	96	93	92	89	88	85	84	81		
12		T	0	-10	-10	-20	0	95	94	91	90	87	86	83	82		
13		T	-10	0	0	-10	0	97									
14		T	-20	0	0	-20	0	98									
15		T	-30	0	0	-30	0	99									

TEST : 8-TPT-680 (LA-48)

DATE : 5/30/74

DATA SET / RUN NUMBER COLLATION SUMMARY

DATA SET IDENTIFIER	CONFIGURATION	SCHD.	PARAMETERS/VALUES				NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)									
			α	β	S_{24}	S_{25}		S_{26}	.60	.80	.85	.90	.92	.95	.98	1.08	
RH1001	0898 CREATER W/	A	0	0	0	0	0	71	61	51	41	31	21	11	1		
02	139 NOSE	T	0	-10	-10	0	0	72	62	52	42	32	22	12	2		
03	$S_{28} = 25^\circ, S_{29} = 0$	T	0	-20	-20	0	0	73	63	53	43	33	23	13	3		
04		T	0	-30	-30	0	0	74	64	54	44	34	24	14	4		
05		T	-10	-10	-10	-10	0	75	65	55	45	35	25	15	5		
06		T	-20	-20	-20	-20	0	76	66	56	46	36	26	16	6		
07		T	5	0	0	-5	0	77	67	57	47	37	27	17	7		
08		T	5	-20	-20	-5	0	78	68	58	48	38	28	18	8		
09		T	10	-20	-20	-10	0	79	69	59	49	39	29	19			

TABLE III
MODEL DIMENSIONAL DATA

MODEL COMPONENT : BODY - P20

GENERAL DESCRIPTION : 089B-139B (MODIFIED NOSE), NOSE SECTION FROM
FULL-SCALE STATION 238, 0 TO STATION 500 FROM NAR DRAWING VL70-0001393.

REMAINING BODY AFT OF STATION 500 FROM NAR VL70-000023.

MODEL SCALE 0.0165

DRAWING NUMBER : VL70-000023, VL70-000139B

DIMENSIONS :

	FULL SCALE	MODEL SCALE
Length	<u>1290.3 IN.</u>	<u>21.090 IN.</u>
Max Width	<u>265.0</u>	<u>4.372 IN.</u>
Max Depth	<u>248.0</u>	<u>4.092 IN.</u>
Fineness Ratio	<u>4.069</u>	<u>4.960 IN.</u>
Area	<u>156.4000 SQ.FT.</u>	<u>17.8927 SQ.FT.</u>
Max. Cross-Sectional	<u> </u>	<u> </u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

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TABLE III (Continued)
MODEL DIMENSIONAL DATA

MODEL COMPONENT : BODY FLAP-FH

GENERAL DESCRIPTION : 079B-120

MODEL SCALE: 0.0165

DRAWING NUMBER : WFO-000001A

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length	<u>84.700</u>	<u>1.398</u>
Max Width	<u>255.000</u>	<u>4.372</u>
Max Depth	<u>21.000</u>	<u>.346</u>
Fineness Ratio	<u></u>	<u></u>
Area	<u></u>	<u></u>
Max. Cross-Sectional	<u></u>	<u></u>
Planform	<u>142.6400</u>	<u>5.5921</u>
Wetted	<u></u>	<u></u>
Base	<u>38.6460</u>	<u>1.5151</u>

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TABLE III (Continued)
MODEL DIMENSIONAL DATA

MODEL COMPONENT : ONE ROD - H¹⁴

GENERAL DESCRIPTION : 030B-132

MODEL SCALE: 0.0165

DRAWING NUMBER : VI.70-000024

DIMENSIONS :

FULL SCALE MODEL SCALE

Length	<u>346.000</u>	<u>5.700</u>
Max Width	<u>108.000</u>	<u>1.782</u>
Max Depth	<u>113.800</u>	<u>1.873</u>
Fineness Ratio	<u> </u>	<u> </u>
Area	<u> </u>	<u> </u>
Max. Cross-Sectional	<u> </u>	<u> </u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

ONE ROD CONCENTRATION

Z Axis Orbits	<u>463.900</u>	<u>7.654</u>
Y Axis Orbits	<u>80.000</u>	<u>1.320</u>

TABLE III (Continued)
MODEL DIMENSIONAL DATA

MODEL COMPONENT GLAZED FLWON (6-inch GAP) - E43

GENERAL DESCRIPTION Configuration 1404/B Orbiter elevon.

NOTE: E43 is a glazied version of E26. Data are for one side.

MODEL SCALE: 0.0165 MODEL DRAWING: SS-A00148

DRAWING NUMBER

DIMENSIONS :	FULL SCALE	MODEL SCALE
Area - Ft ²	<u>210.0</u>	<u>0.0572</u>
Span (equivalent) - In.	<u>342.2</u>	<u>5.760</u>
Inb'd equivalent chord - In.	<u>113.004</u>	<u>1.947</u>
Outb'd equivalent chord/ total surface chord	<u>55.192</u>	<u>0.9108</u>
Ratio movable surface chord/ total surface chord	<u></u>	<u></u>
At Inb'd equiv. chord	<u>0.2096</u>	<u>0.2306</u>
At Outb'd equiv. chord	<u>0.4004</u>	<u>0.4404</u>
Sweep Back Angles, degrees	<u></u>	<u></u>
Leading Edge	<u>0.00</u>	<u>0.00</u>
Trailing Edge	<u>-10.056</u>	<u>-10.056</u>
Hingeline	<u>0.00</u>	<u>0.00</u>
Area Moment (Normal to hinge line)	<u>1587.25</u>	<u>0.00713</u>
Mean Aerodynamic Chord (\bar{c}), in.	<u>20.7</u>	<u>1.4016</u>

TABLE III (Continued)
MODEL DIMENSIONAL DATA

MODEL COMPONENT PROTON - B5

GENERAL DESCRIPTION CONFIGURATION FOR LINES VL70-000095.

MODEL SCALE: 0.0165

DRAWING NUMBER VL70-000095

DIMENSIONS	FULL SCALE	MODEL SCALE
Area	<u>106.380 SQ.FT.</u>	<u>.0090 SQ.FT.</u>
Span (equivalent)	<u>201.00 IN.</u>	<u>3.32 IN.</u>
Inb'd equivalent chord	<u>21.585 IN.</u>	<u>1.51 IN.</u>
Outb'd equivalent chord	<u>50.833 IN.</u>	<u>.84 IN.</u>
Ratio movable surface chord/ total surface chord	<u> </u>	<u> </u>
At Inb'd equiv. chord	<u>.400</u>	<u>.400</u>
At Outb'd equiv. chord	<u>.400</u>	<u>.400</u>
Sweep Back Angles, degrees	<u> </u>	<u> </u>
Leading Edge	<u>34.83</u>	<u>34.83 DEG.</u>
Trailing Edge	<u>26.25</u>	<u>26.25 DEG.</u>
Hingeline	<u>34.83</u>	<u>34.83 DEG.</u>
Area Moment (Normal to hinge line)	<u>526.1250 CU.FT.</u>	<u>4.0840 CU.IN.</u>

TABLE IIT (Continued)
MODEL DIMENSIONAL DATA

MODEL COMPONENT : VERTICAL TAIL - V5

GENERAL DESCRIPTION CENTERLINE VERTICAL TAIL DOUBLE WEDGE AIRFOIL
WITH ROUNDED LEADING EDGE.

MODEL SCALE: 0.0165

DRAWING NUMBER VL70-000025

DIMENSIONS	FULL SCALE	MODEL SCALE
Area	<u>413.2500 SQ. FT.</u>	<u>16.2011 SQ. IN.</u>
Span (equivalent)	<u>315.72</u>	<u>5.21</u> IN.
Inb'd equivalent chord	<u>268.50</u> IN.	<u>4.43</u> IN.
Outb'd equivalent chord	<u>108.47</u> IN.	<u>1.79</u> IN.
Ratio movable surface chord/ total surface chord	<u> </u>	<u> </u>
At Inb'd equiv. chord	<u> </u>	<u> </u>
At Outb'd equiv. chord	<u> </u>	<u> </u>
Sweep Back Angles, degrees	<u> </u>	<u> </u>
Leading Edge	<u>45.00</u> DEG.	<u>45.00</u> DEG.
Trailing Edge	<u>26.242</u> DEG.	<u>26.25</u> DEG.
Hingeline	<u> </u>	<u> </u>
Area Moment (Normal to hinge line)	<u> </u>	<u> </u>

TABLE III (Concluded)

MODEL COMPONENT: WING - 11.27

GENERAL DESCRIPTION: OPTIMUM CONFIGURATION PER LINES VL70-000023 (DIHEDRAL IS
DEFINED AT THE LOWER SURFACE OF THE WING AT THE 75.33 PERCENT ELEMENT LINE PRO-
JECTED INTO A PLANE PERPENDICULAR TO THE FUSELAGE REFERENCE LINE).

MODEL SCALE: - 0.0165

DRAWING NUMBER:

VL70-000023DIMENSIONS:FULL-SCALEMODEL SCALETOTAL DATA

Area	2690.0000 SQ.FT.	105.4500 SQ.IN.
Planform		
Wetted		
Span (equivalent)	936.680 IN.	15.455 IN.
Aspect Ratio	2.265	2.265
Rate of Taper	1.177	1.177
Taper Ratio	.200	.200
Dihedral Angle, degrees	3.500 DEG.	3.500 DEG.
Incidence Angle, degrees	3.000 DEG.	3.000 DEG.
Aerodynamic Twist, degrees	3.000 DEG.	3.000 DEG.
Toe-In Angle		
Cant Angle		
Sweep Back Angles, degrees		
Leading Edge	45.000 DEG.	45.000 DEG.
Trailing Edge	-10.240 IN.	-10.240 DEG.
0.25 Element Line	35.209 DEG.	35.240 DEG.
Chords:		
Root (Wing Sta. 0.0)	580.24 IN.	11.27 IN.
Tip, (equivalent)	137.85 IN.	2.27 IN.
MAC	474.31 IN.	7.88 IN.
Fus. Sta. of .25 MAC	1137.00 IN.	18.77 IN.
W.P. of .25 MAC	299.13 IN.	3.01 IN.
B.L. of .25 MAC		
Airfoil Section		
Root		
Tip		

EXPOSED DATA

Area	1752.2000 SQ.FT.	68.6250 SQ.IN.
Span, (equivalent)	720.68 IN.	11.50 IN.
Aspect Ratio	2.058	2.058
Taper Ratio	.2451	.2451
Chords		
Root	562.40 IN.	9.22 IN.
Tip	137.85 IN.	2.27 IN.
MAC	393.03 IN.	6.48 IN.
Fus. Sta. of .25 MAC	1145.31 IN.	18.57 IN.
W.P. of .25 MAC	300.70 IN.	1.95 IN.
B.L. of .25 MAC	143.75 IN.	2.37 IN.

Notes

1. Positive directions of force coefficients, moment coefficients, and angles are indicated by arrows
2. For clarity, origins of wind and stability axes have been displaced from the center of gravity

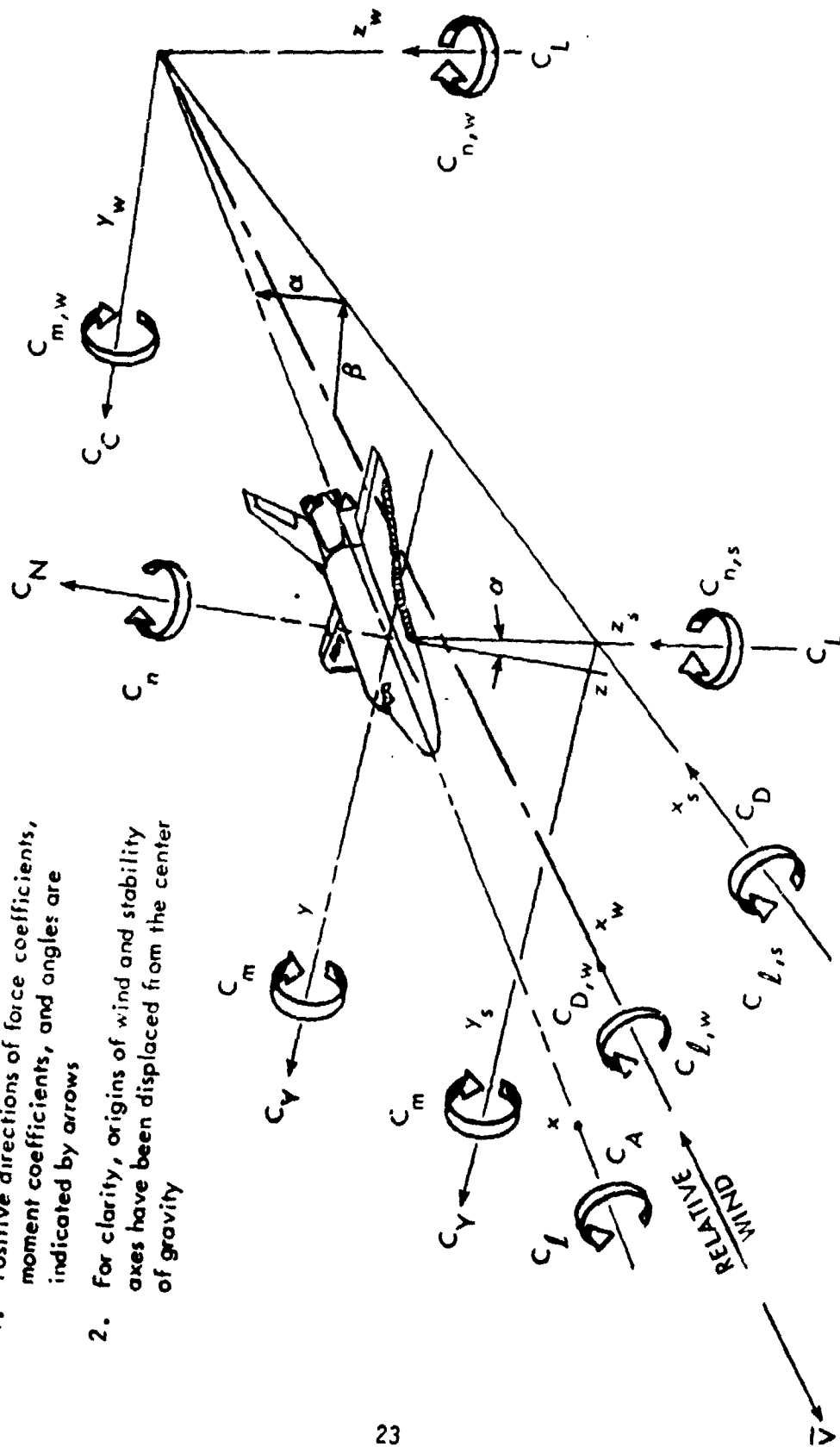
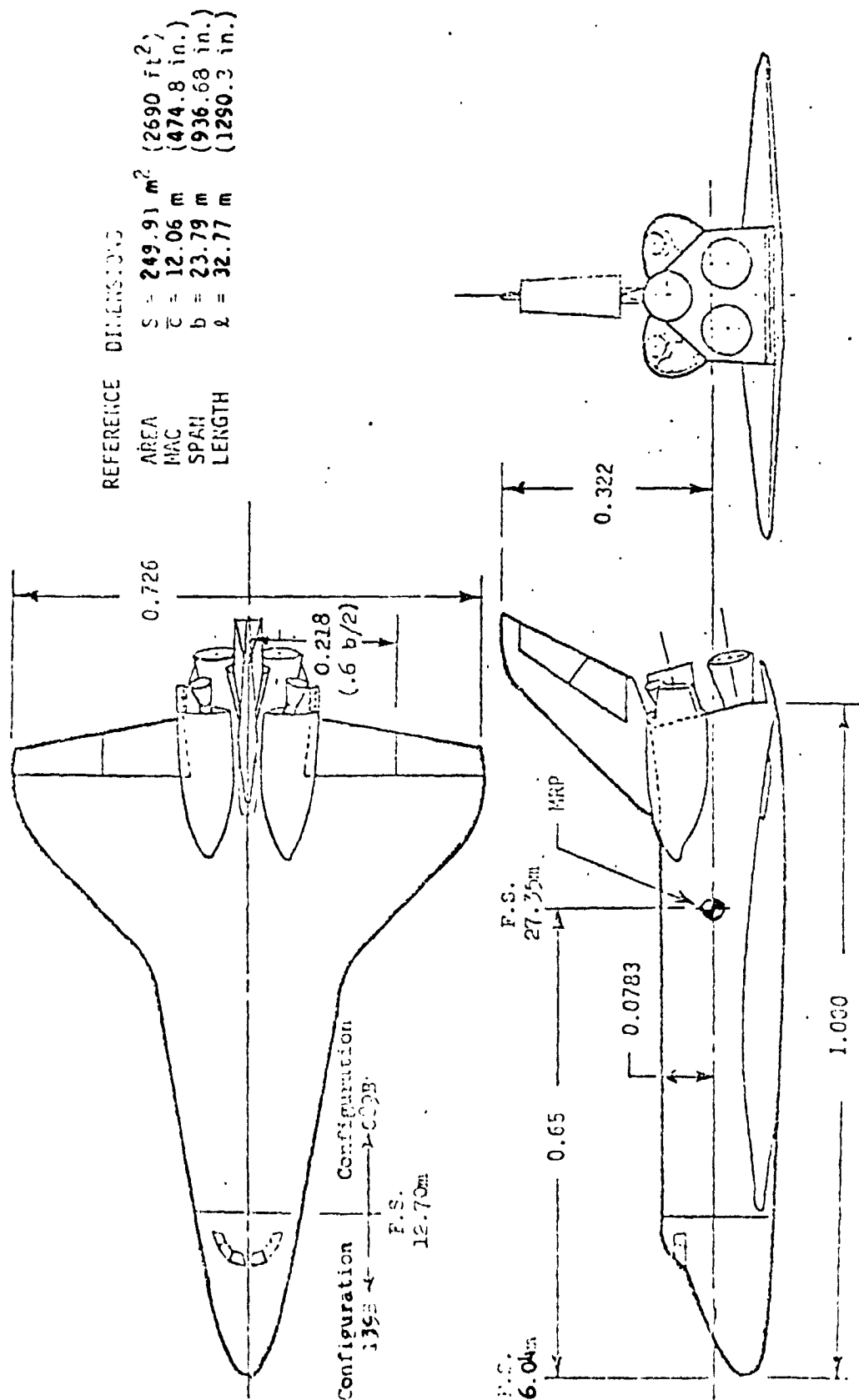


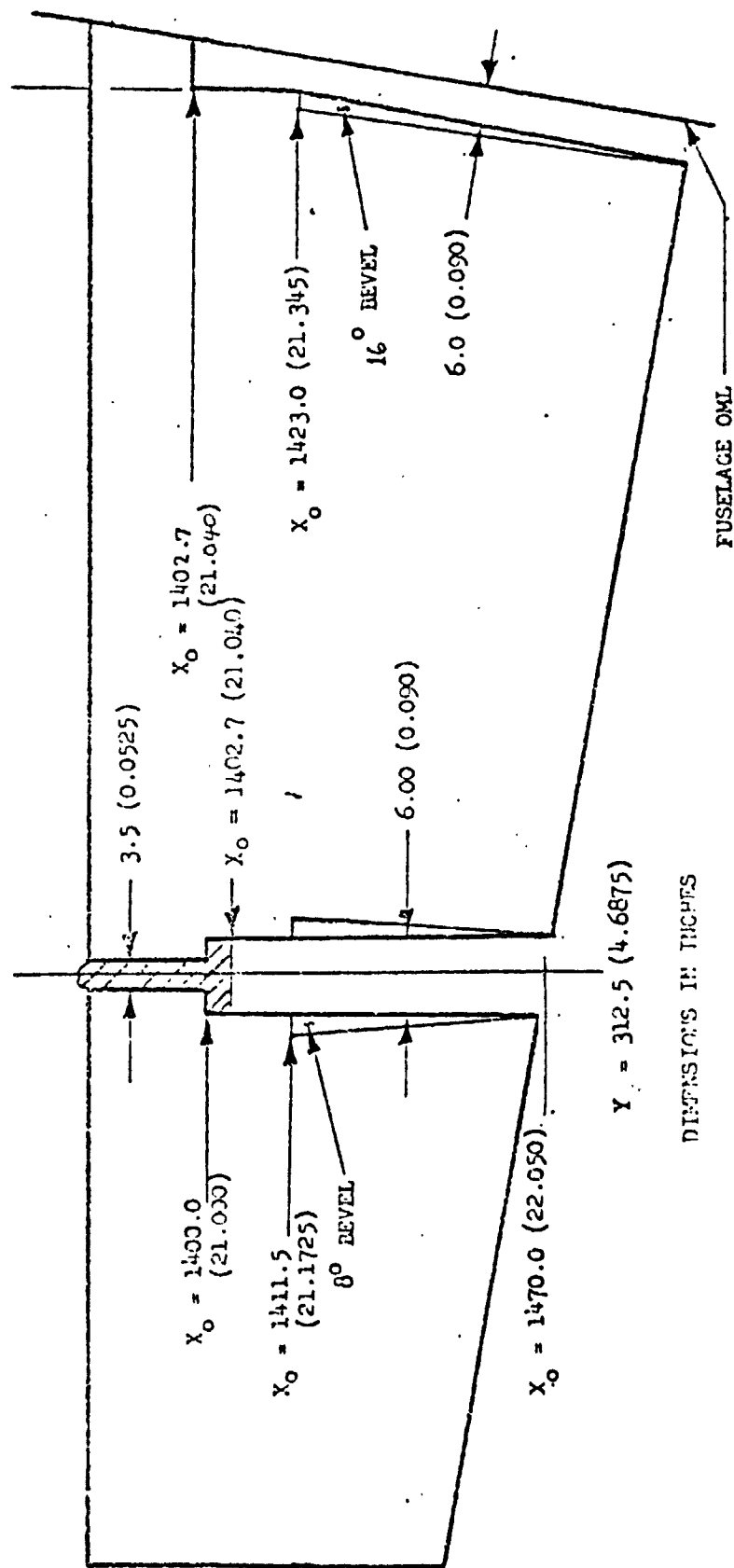
Figure 1. Axis Systems



a. SSV Orbiter Configuration
Figure 2. - Model Sketches

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$Y = 128.50 (1.928)$



$Y = 312.5 (4.6875)$

DIMENSIONS IN INCHES

b. Slotted Floor - E_{43} (6 inch gap)

Figure 2. - Continued



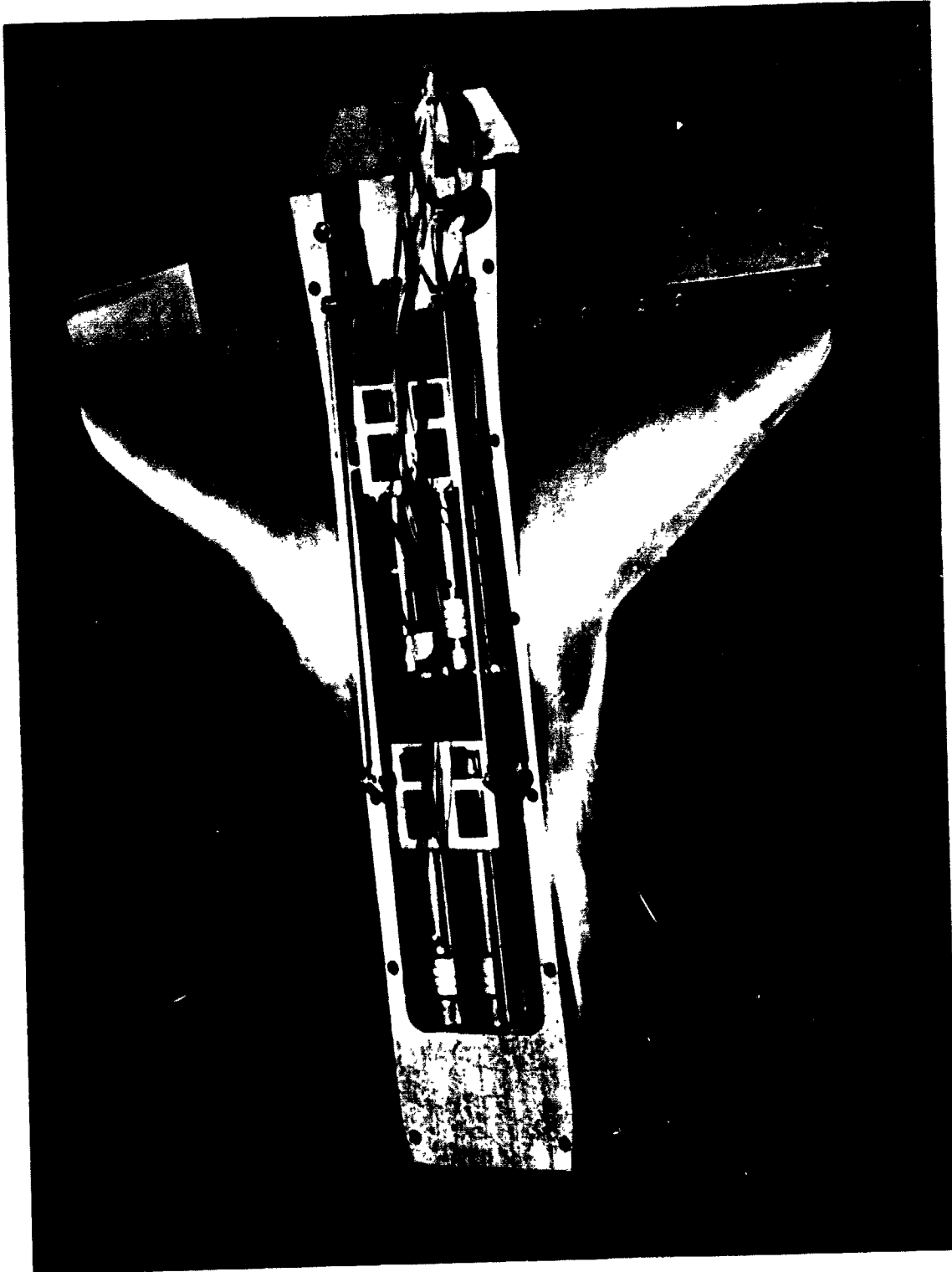
a. Orbiter Configuration, Front, 3/4 View
Figure 3. - Model Photographs

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b. Orbiter Configuration, Rear, 3/4 View
Figure 3. - Continued

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c. View of Elevon Drive Motors
Figure 3. - Concluded

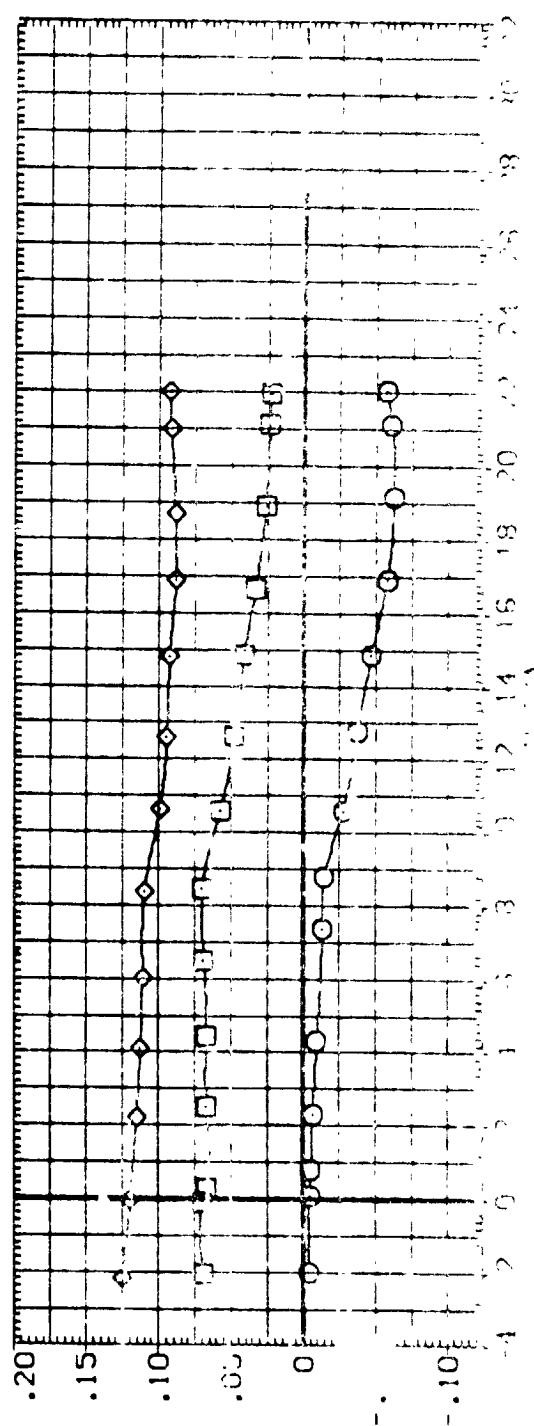
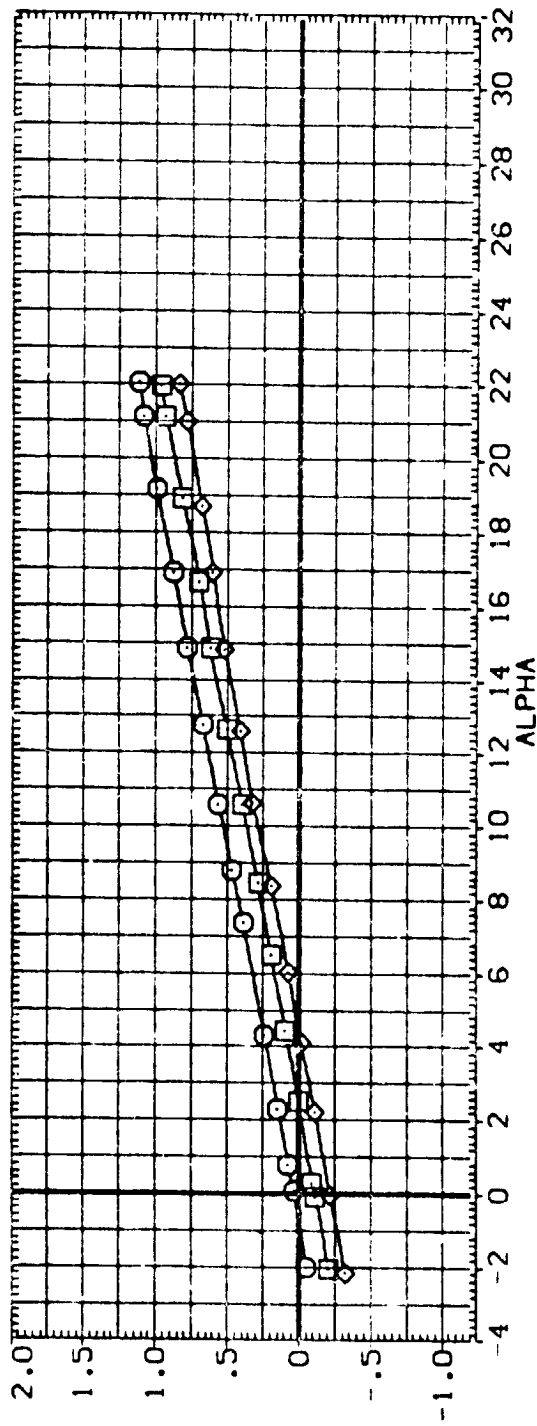
DATA FIGURES

DATA SET SYMBOL CONFIGURATION DESCRIPTION ELV-L0 ELV-L1 ELV-R1 ELV-R0

(A11001) LA-48 8-FT IPT 680 RI-0898/139 088 SPLIT ELEVON .000 .000 .000 .000

(A11005) LA-49 8-FT IPT 680 RI-0898/139 088 SPLIT ELEVON -10.000 -10.000 -10.000 -10.000

(A11006) LA-48 8-FT IPT 680 RI-0898/139 088 SPLIT ELEVON -20.000 -20.000 -20.000 -20.000



CLM vs ALPHA

DATA SET SYMBOL. CONFIGURATION DESCRIPTION

	LA-48	8-FT	TPT	880	RI	-0898/139	038	SPL	17	ELEVON	ELV-L0	ELV-L1	ELV-R1	ELV-R0
(AH1001)	LA-48	8-FT	TPT	880	RI	-0898/139	038	SPL	17	ELEVON	0.000	0.000	0.000	0.000
(AH1005)	LA-48	8-FT	TPT	880	RI	-0898/139	038	SPL	17	ELEVON	-10.000	-10.000	-10.000	-10.000
(AH1006)	LA-48	8-FT	TPT	880	RI	-0898/139	038	SPL	17	ELEVON	-20.000	-20.000	-20.000	-20.000

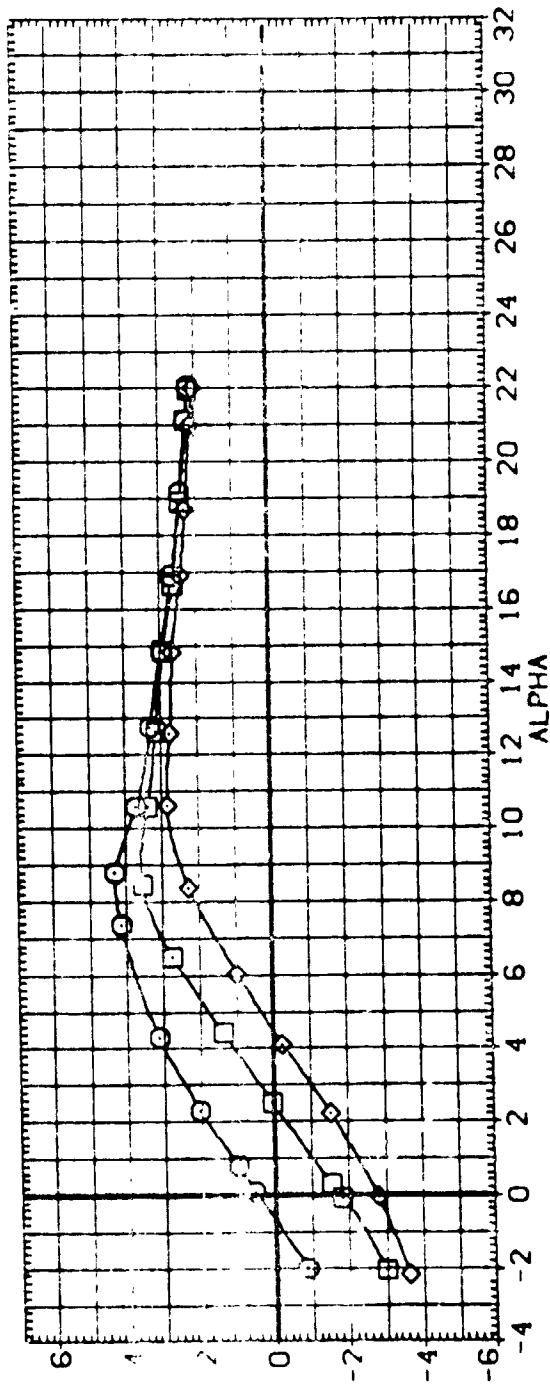
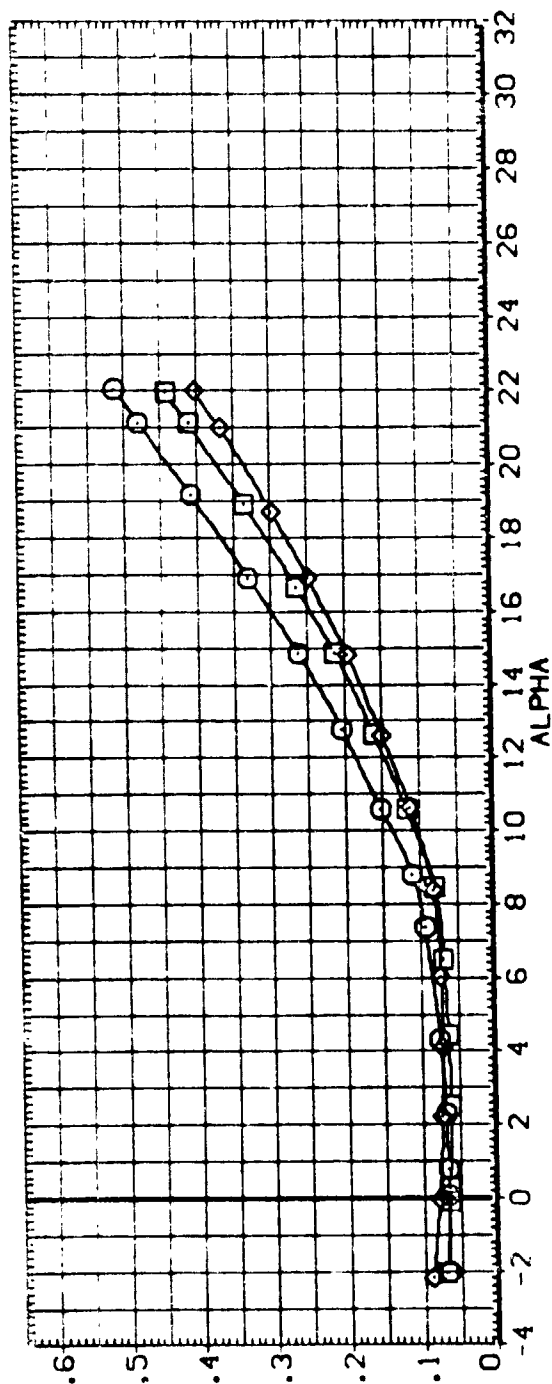
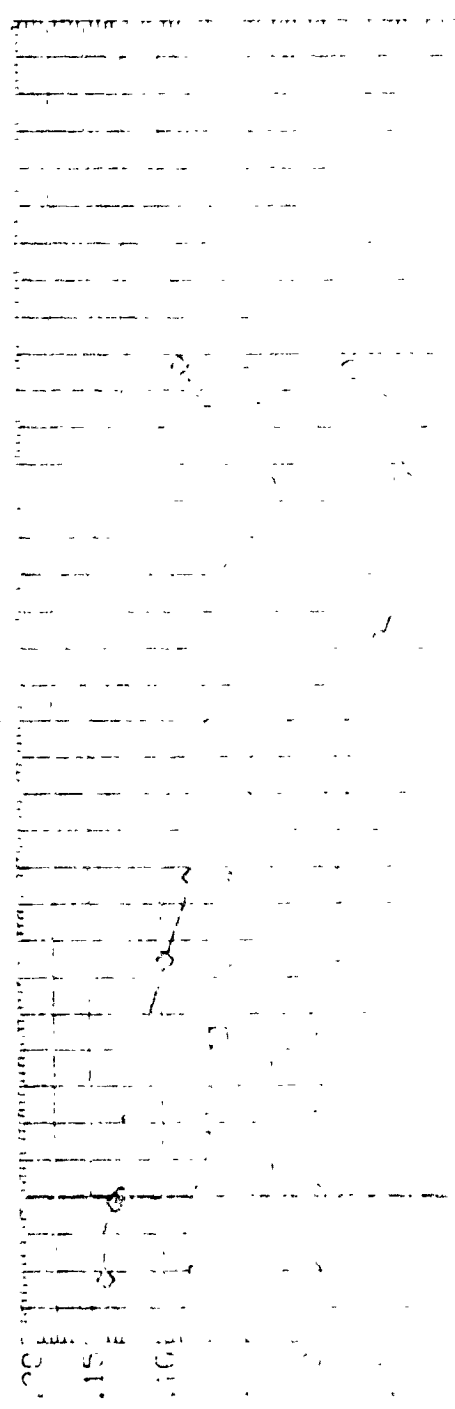
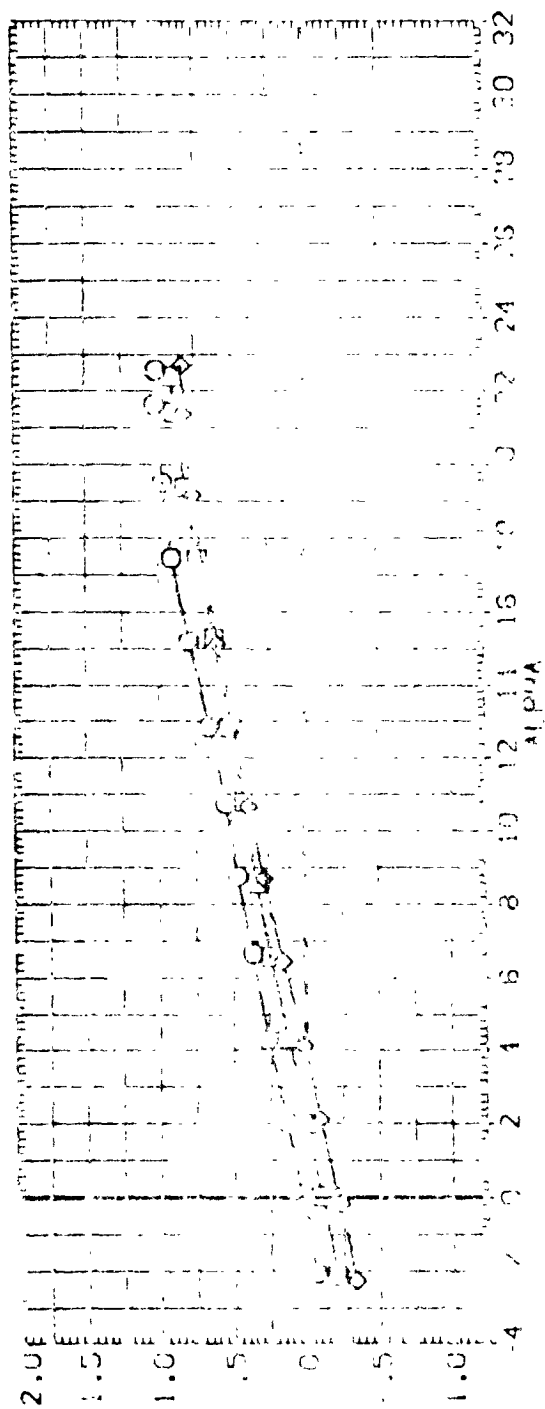


FIGURE 4. FULL SPAN ELEVON PITCH CHARACTERISTICS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0
(AH1001)	LA-49 8-FT TPT 800 RI-0898/135	0.000	0.000	0.000	0.000
(AH1005)	LA-13 8-FT TPT 800 RI-0898/135	-10.000	-10.000	-10.000	-10.000
(AH1006)	LA-49 8-FT TPT 800 RI-0898/135	-20.000	-20.000	-20.000	-20.000



DATA SET SYMBOL CONFIGURATION DESCRIPTION ELEV-LO ELEV-HI ELEV-RO

(A)10011 LA-18 9-FT TPT 680 RI-0898/139 D88 SPL IT ELEVON -10.000 -0.000 -10.000

(A)10015 LA-18 9-FT TPT 680 RI-0898/139 D88 SPL IT ELEVON -10.000 -10.000 -10.000

(A)10015 LA-18 9-FT TPT 680 RI-0898/139 D88 SPL IT ELEVON -10.000 -10.000 -10.000

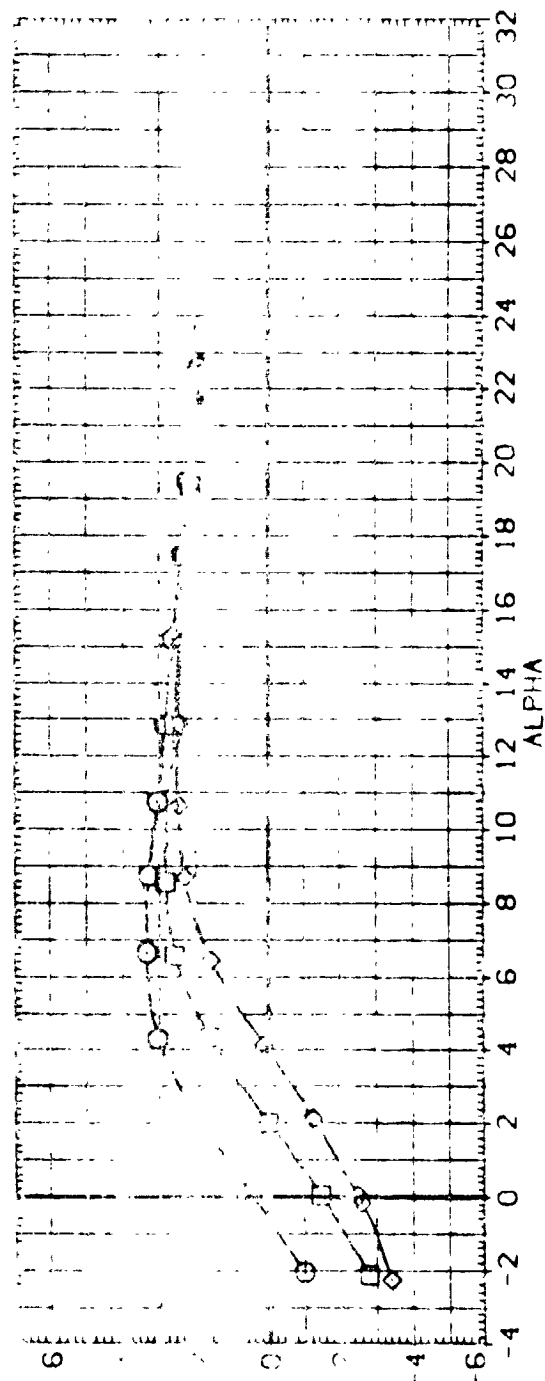
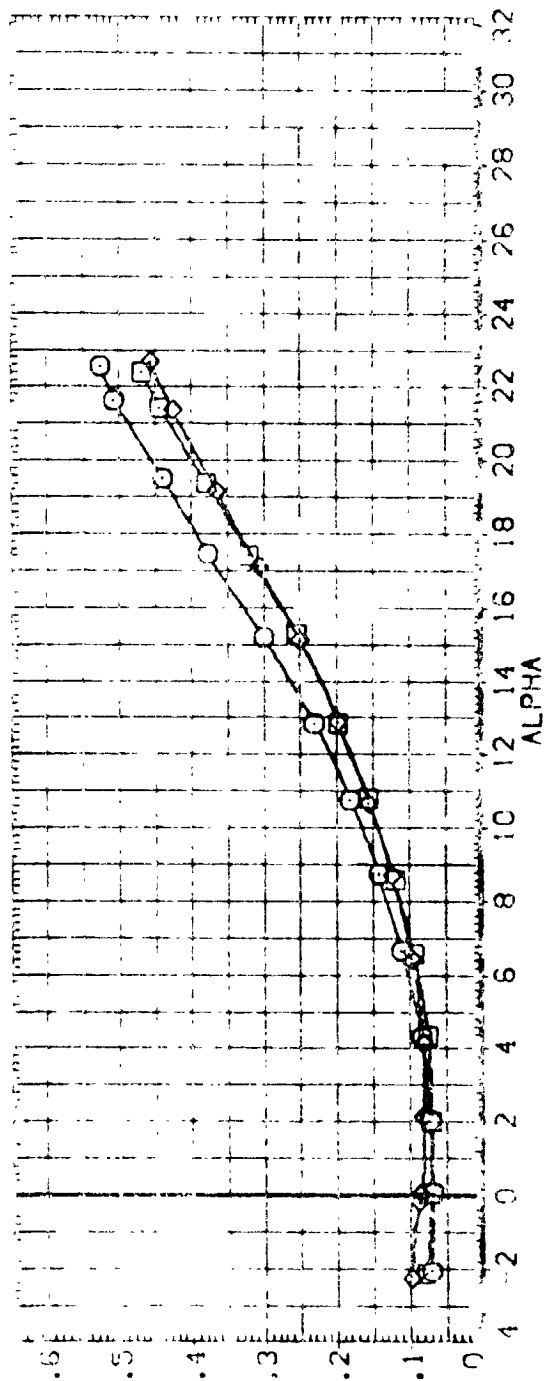


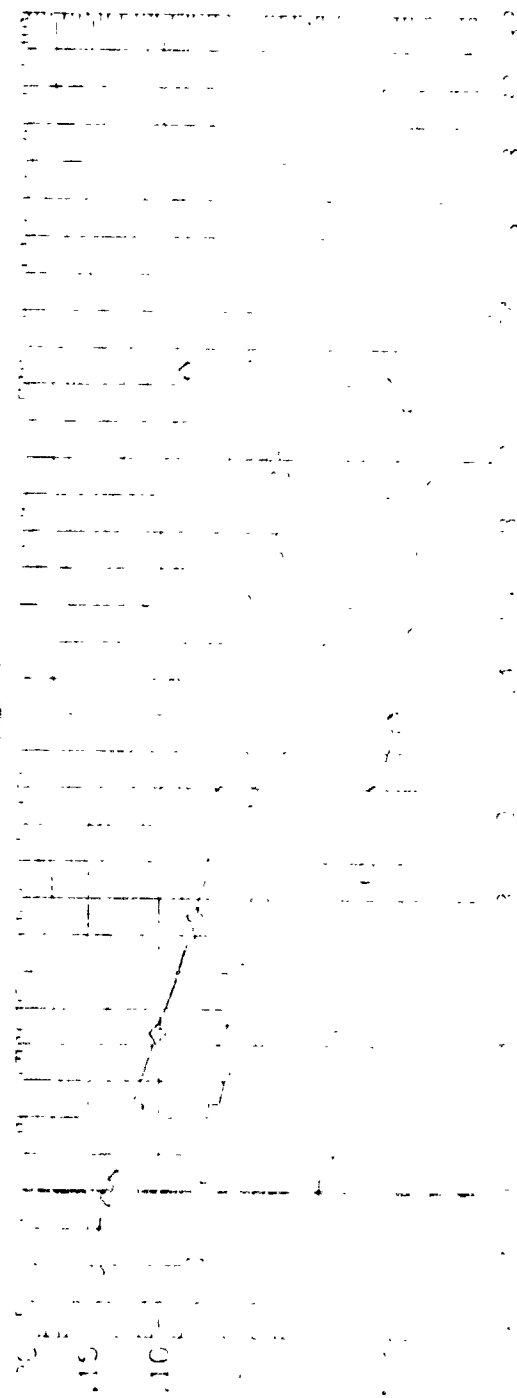
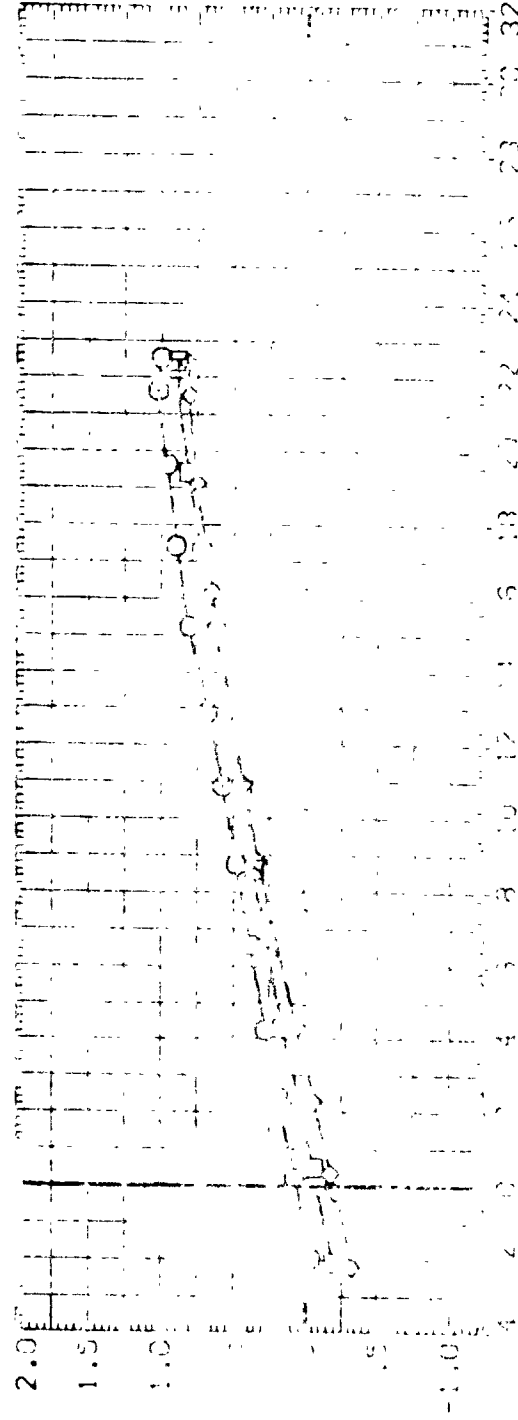
FIGURE 4. FULL SPAN ELEVON PITCH CHARACTERISTICS

(B)MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION

LA-48 8-ET 12T 680 RI-0888/128 078 SPLIT ELEVON
 LA-48 8-ET 12T 680 RI-0888/128 078 SPLIT ELEVON
 LA-48 8-ET 12T 680 RI-0888/128 078 SPLIT ELEVON

ELV-LO ELV-LI ELV-RI ELV-RO
 .000 .000 .000 .000
 -10.000 -10.000 -10.000 -10.000
 -20.000 -20.000 -20.000 -20.000



LA-48 8-ET 12T 680 RI-0888/128 078 SPLIT ELEVON

NO:14301300	DESCRIPTION
NO:14301300	DESCRIPTION

DATA SET SYMBOL

CONFIGURATION	DESCRIPTION	Q98	Q97	Q96	Q95	Q94	Q93	Q92	Q91	Q90	Q89	Q88	Q87	Q86	Q85	Q84	Q83	Q82	Q81	Q80	Q79	Q78	Q77	Q76	Q75	Q74	Q73	Q72	Q71	Q70	Q69	Q68	Q67	Q66	Q65	Q64	Q63	Q62	Q61	Q60	Q59	Q58	Q57	Q56	Q55	Q54	Q53	Q52	Q51	Q50	Q49	Q48	Q47	Q46	Q45	Q44	Q43	Q42	Q41	Q40	Q39	Q38	Q37	Q36	Q35	Q34	Q33	Q32	Q31	Q30	Q29	Q28	Q27	Q26	Q25	Q24	Q23	Q22	Q21	Q20	Q19	Q18	Q17	Q16	Q15	Q14	Q13	Q12	Q11	Q10	Q9	Q8	Q7	Q6	Q5	Q4	Q3	Q2	Q1	Q0	
LA-48 8-FT TPT	880 RI-0898/	39	Q98	Q97	Q96	Q95	Q94	Q93	Q92	Q91	Q90	Q89	Q88	Q87	Q86	Q85	Q84	Q83	Q82	Q81	Q80	Q79	Q78	Q77	Q76	Q75	Q74	Q73	Q72	Q71	Q70	Q69	Q68	Q67	Q66	Q65	Q64	Q63	Q62	Q61	Q60	Q59	Q58	Q57	Q56	Q55	Q54	Q53	Q52	Q51	Q50	Q49	Q48	Q47	Q46	Q45	Q44	Q43	Q42	Q41	Q40	Q39	Q38	Q37	Q36	Q35	Q34	Q33	Q32	Q31	Q30	Q29	Q28	Q27	Q26	Q25	Q24	Q23	Q22	Q21	Q20	Q19	Q18	Q17	Q16	Q15	Q14	Q13	Q12	Q11	Q10	Q9	Q8	Q7	Q6	Q5	Q4	Q3	Q2	Q1	Q0
LA-48 8-FT TPT	890 RI-0898/	39	Q98	Q97	Q96	Q95	Q94	Q93	Q92	Q91	Q90	Q89	Q88	Q87	Q86	Q85	Q84	Q83	Q82	Q81	Q80	Q79	Q78	Q77	Q76	Q75	Q74	Q73	Q72	Q71	Q70	Q69	Q68	Q67	Q66	Q65	Q64	Q63	Q62	Q61	Q60	Q59	Q58	Q57	Q56	Q55	Q54	Q53	Q52	Q51	Q50	Q49	Q48	Q47	Q46	Q45	Q44	Q43	Q42	Q41	Q40	Q39	Q38	Q37	Q36	Q35	Q34	Q33	Q32	Q31	Q30	Q29	Q28	Q27	Q26	Q25	Q24	Q23	Q22	Q21	Q20	Q19	Q18	Q17	Q16	Q15	Q14	Q13	Q12	Q11	Q10	Q9	Q8	Q7	Q6	Q5	Q4	Q3	Q2	Q1	Q0
LA-48 8-FT TPT	890 RI-0898/	39	Q98	Q97	Q96	Q95	Q94	Q93	Q92	Q91	Q90	Q89	Q88	Q87	Q86	Q85	Q84	Q83	Q82	Q81	Q80	Q79	Q78	Q77	Q76	Q75	Q74	Q73	Q72	Q71	Q70	Q69	Q68	Q67	Q66	Q65	Q64	Q63	Q62	Q61	Q60	Q59	Q58	Q57	Q56	Q55	Q54	Q53	Q52	Q51	Q50	Q49	Q48	Q47	Q46	Q45	Q44	Q43	Q42	Q41	Q40	Q39	Q38	Q37	Q36	Q35	Q34	Q33	Q32	Q31	Q30	Q29	Q28	Q27	Q26	Q25	Q24	Q23	Q22	Q21	Q20	Q19	Q18	Q17	Q16	Q15	Q14	Q13	Q12	Q11	Q10	Q9	Q8	Q7	Q6	Q5	Q4	Q3	Q2	Q1	Q0
LA-48 8-FT TPT	890 RI-0898/	39	Q98	Q97	Q96	Q95	Q94	Q93	Q92	Q91	Q90	Q89	Q88	Q87	Q86	Q85	Q84	Q83	Q82	Q81	Q80	Q79	Q78	Q77	Q76	Q75	Q74	Q73	Q72	Q71	Q70	Q69	Q68	Q67	Q66	Q65	Q64	Q63	Q62	Q61	Q60																																																												

ELEV-09	ELEV-R1	ELEV-80
6000	6000	-1000
10000	10000	-1000
20000	20000	-1000



FIGURE 4. FULL SPAN ELEVEN PITCH CHARACTERISTICS

$$(C)_{\text{MACH}} = .85$$

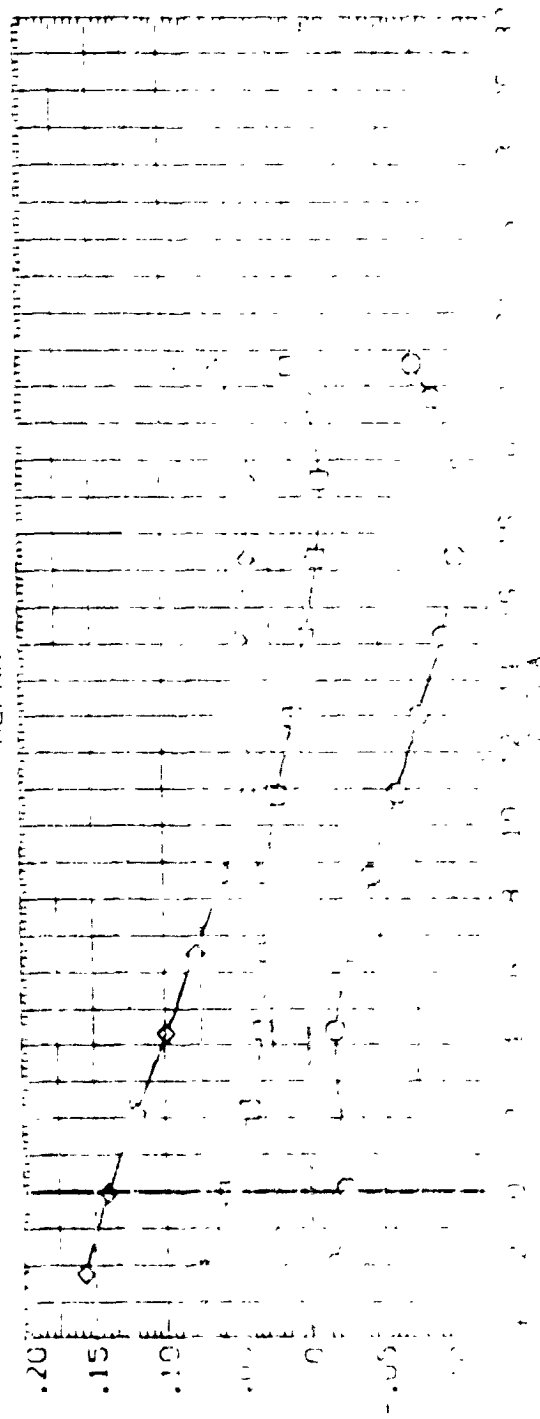
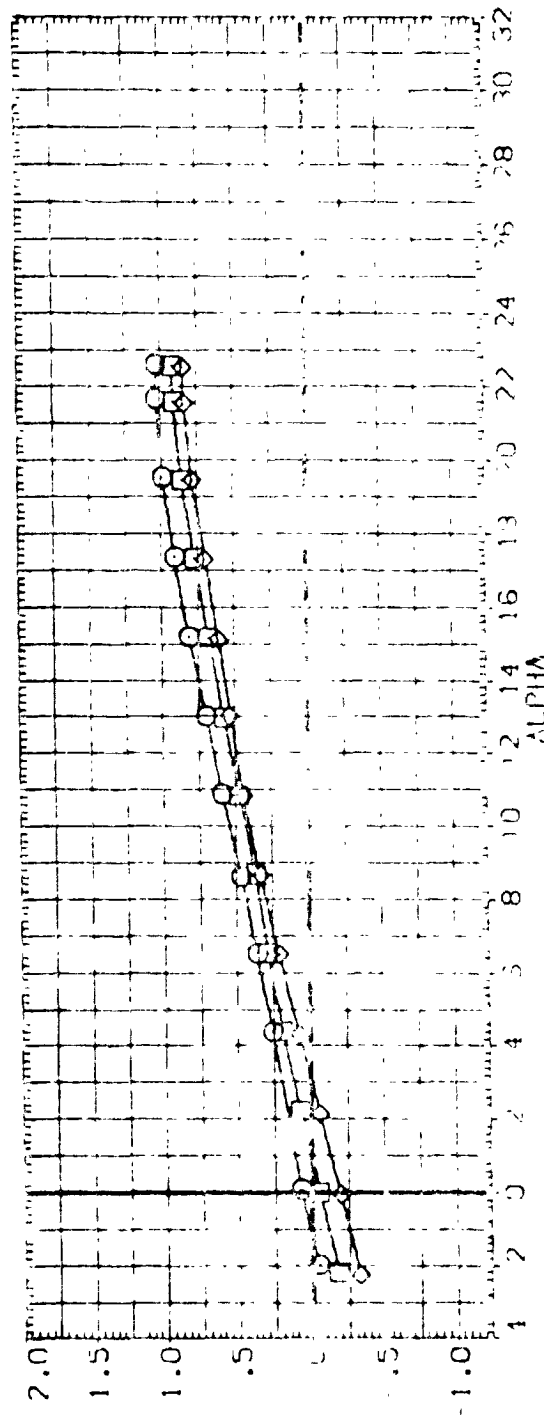
330

5

DATA SET SYMBOL CONFIGURATION DESCRIPTION

LA-48 8-FT TET 680 RI-0688/139 053 SPL IT ELEVON
 LA-49 8-FT TET 680 RI-0688/139 053 SPL IT ELEVON
 LA-50 8-FT TET 680 RI-0688/139 053 SPL IT ELEVON
 LA-51 8-FT TET 680 RI-0688/139 053 SPL IT ELEVON

ELV-L0 ELV-L1 ELV-R1 ELV-R0
 .000 .000 .000 .000
 -10.000 -10.000 -10.000 -10.000
 -20.000 -20.000 -20.000 -20.000



LA-48 8-FT TET 680 RI-0688/139 053 SPL IT ELEVON

LA-49 8-FT TET 680 RI-0688/139 053 SPL IT ELEVON

LA-50 8-FT TET 680 RI-0688/139 053 SPL IT ELEVON

LA-51 8-FT TET 680 RI-0688/139 053 SPL IT ELEVON

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION	FLY-TO	FLY-RI	FLY-TO	FLY-RI
1001	1A 1-FT 1PT	180 RI-098/128	000	000	000	000
1005	1B 2-FT 1PT	180 RI-098/128	000	000	000	000
1006	1C 3-FT 1PT	180 RI-098/128	000	000	000	000

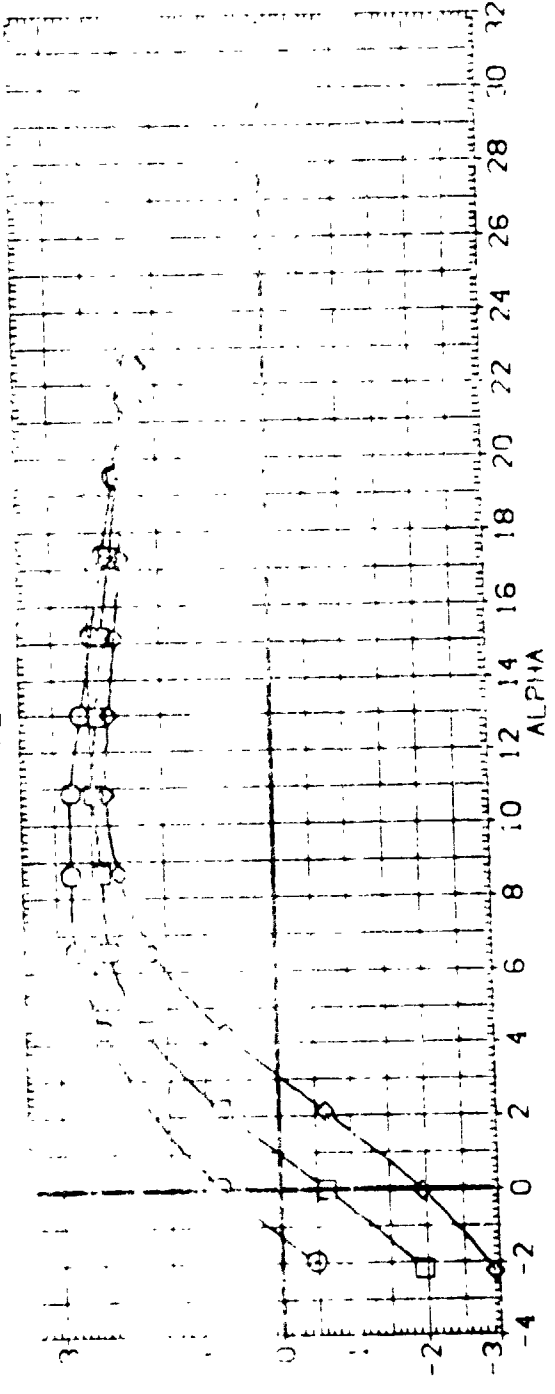
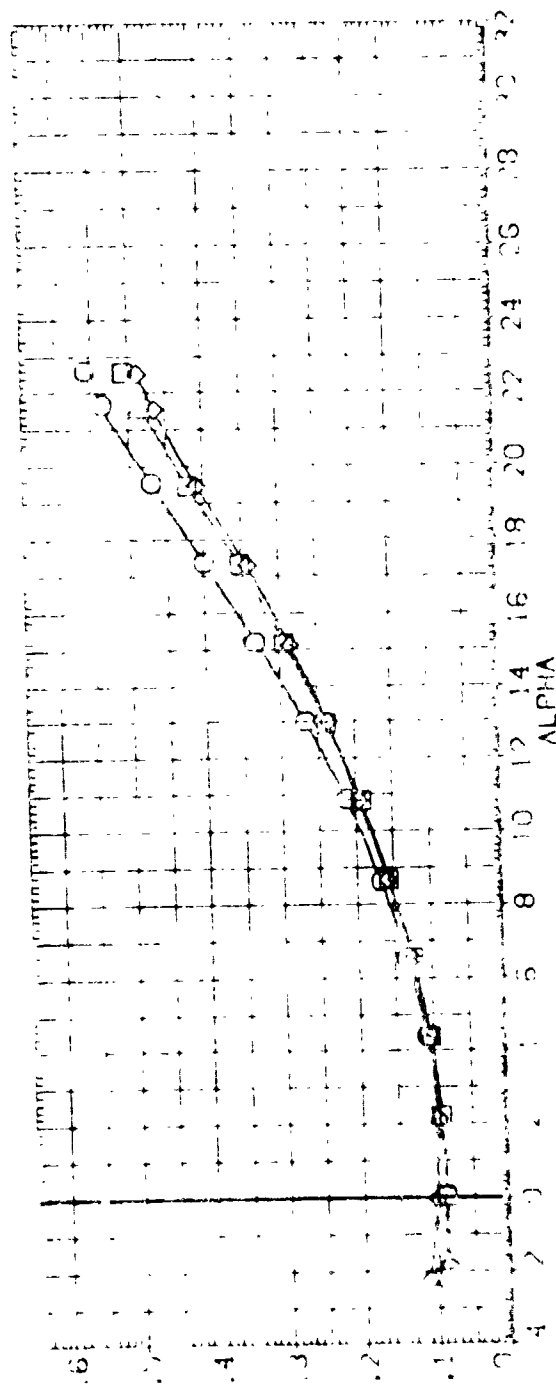


FIGURE 4. FULL SPAN ELEVEN PITCH CHARACTERISTICS

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{D)MACH = .90
```

DATA SET SYMBOL CONFIGURATION DESCRIPTION ELV-L0 ELV-L1 ELV-R1 ELV-R0

(AH1001) LA-18 8-FT TPT 660 RI-0668/139 078 SPL IT ELEVON .000 .000 .000 .000

(AH1005) LA-19 8-FT TPT 660 RI-0668/139 078 SPL IT ELEVON -10.000 -10.000 -10.000 -10.000

(AH1006) LA-18 8-FT TPT 660 RI-0668/139 078 SPL IT ELEVON -20.000 -20.000 -20.000 -20.000

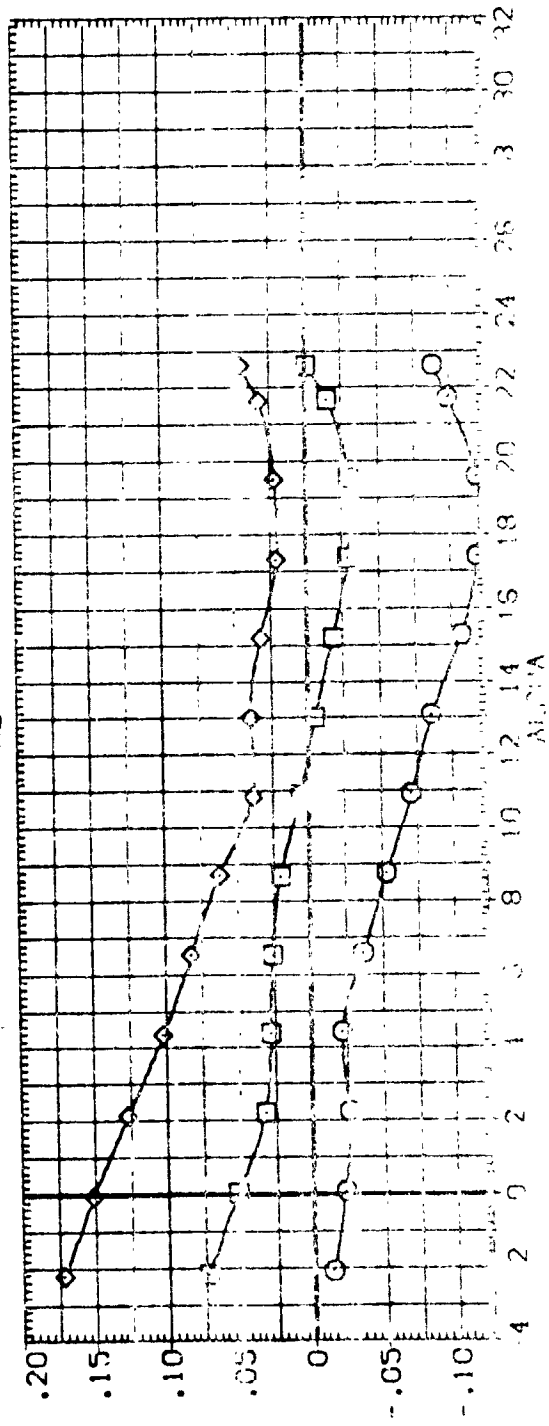
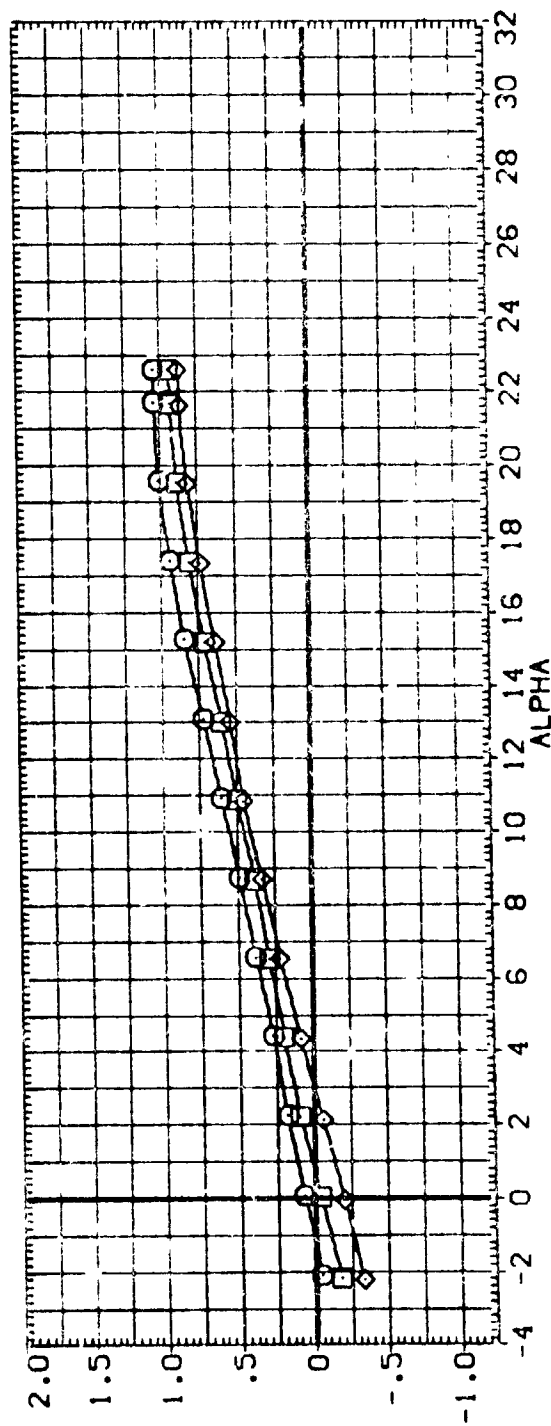


FIGURE 4.1 CL vs ALPHA FOR HIGH CHARACTERISTICS

CLM vs ALPHA

DATA SET SYMBOL: CONFIGURATION DESCRIPTION

ELV-L0	ELV-L1	ELV-R1	ELV-R0
0.00	0.00	0.00	0.00
10.000	10.000	10.000	10.000
-20.000	-20.000	-20.000	-20.000

LA-48 8-ET 1PT 690 R] 058 SPLT ELEVON
 LA-48 8-ET 1PT 690 R] 058 SPLT ELEVON
 LA-48 8-ET 1PT 690 R] 058 SPLT ELEVON

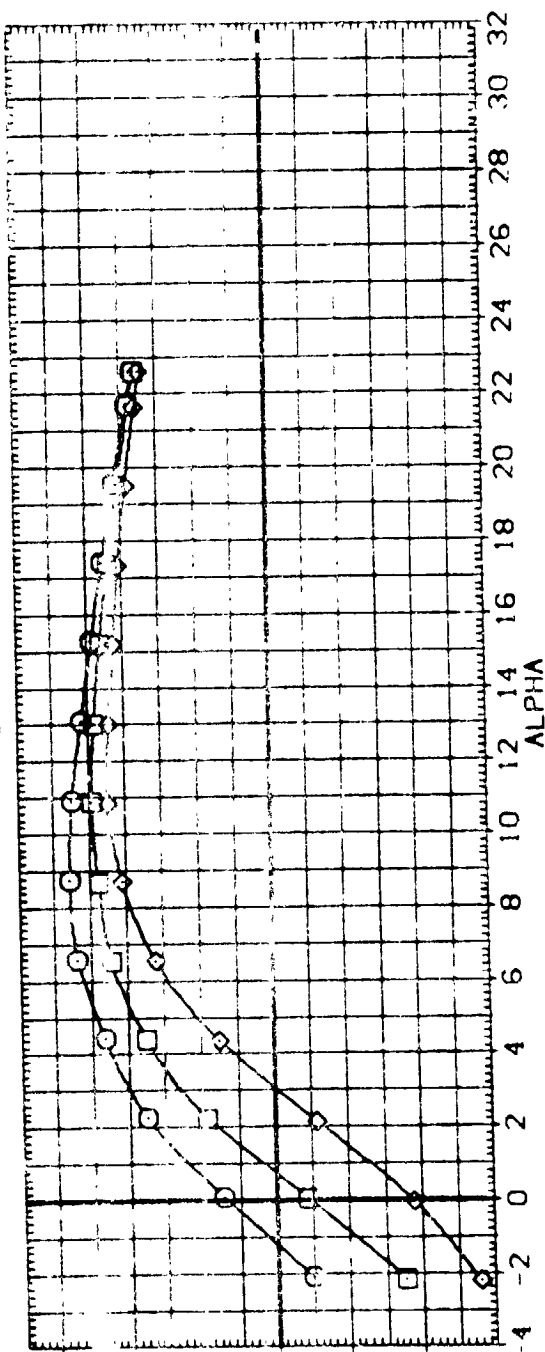
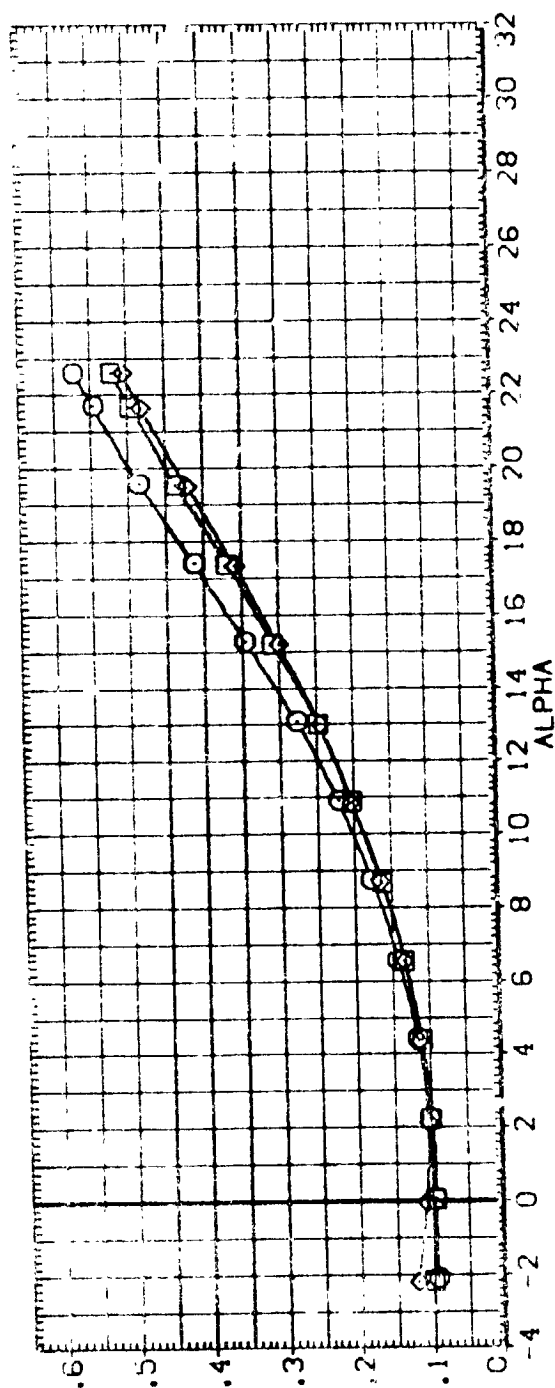


FIGURE 4. FULL SPAN ELEVON PITCH CHARACTERISTICS

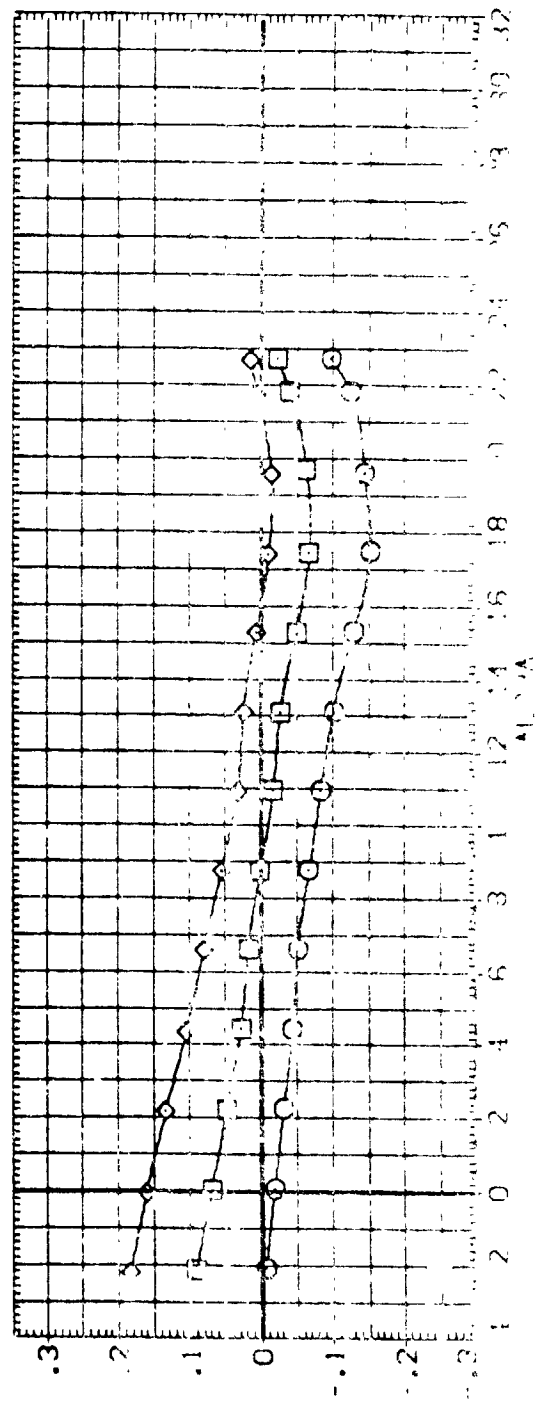
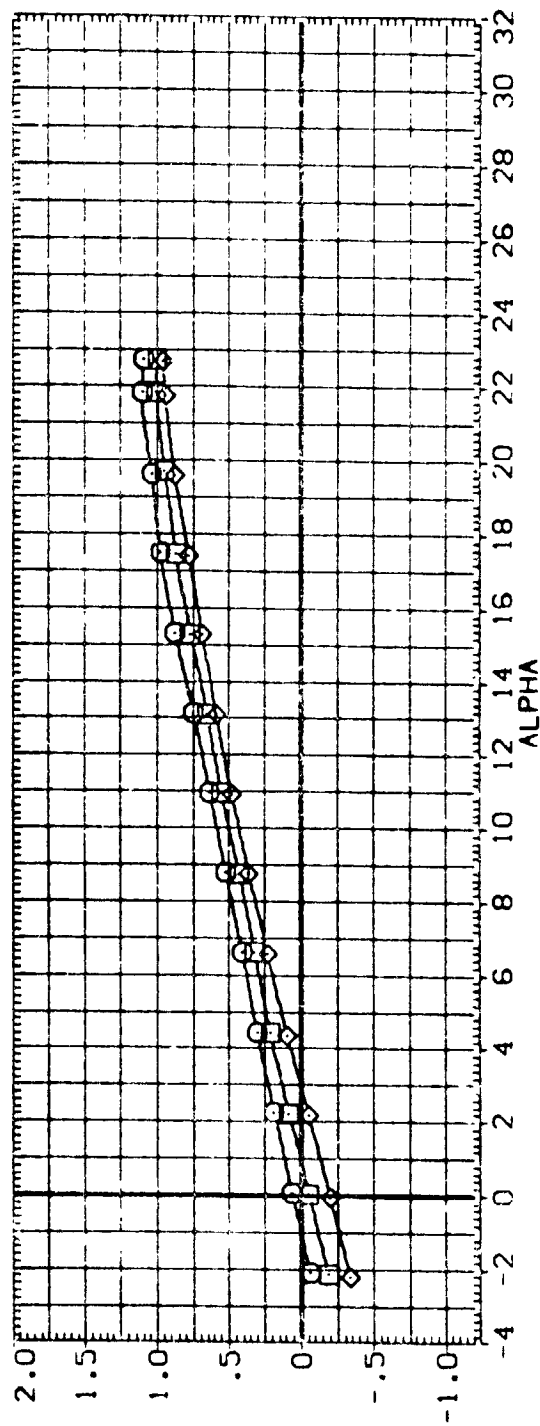
(E)MACH = .92

DATA SET SYMBOL CONFIGURATION DESCRIPTION ELV-L0 ELV-L1 ELV-Q1 ELV-Q0

(AM1001) LA-19 8-FT TPT 680 RI-0893/135 0R8 SPL1T ELEVON .000 .000 .000 .000

(AM1005) LA-19 8-FT TPT 680 RI-0893/135 0R8 SPL1T ELEVON -10.000 -10.000 -10.000 -10.000

(AM1006) LA-19 8-FT TPT 680 RI-0893/135 0R8 SPL1T ELEVON -20.000 -20.000 -20.000 -20.000



CONF 1 P41 7110 4 100 000 000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (A)1001 LA-48 8-FT TPT 680 RI-0698/139 0-88 SPL IT ELEVON
 (A)1005 LA-48 8-FT TPT 680 RI-0698/139 0-88 SPL IT ELEVON
 (A)1006 LA-48 8-FT TPT 680 RI-0698/139 0-88 SPL IT ELEVON

ELEV-LO ELEV-LI ELEV-RI ELEV-RO
 -10.000 -10.000 -10.000 -10.000
 -20.000 -10.000 -10.000 -10.000

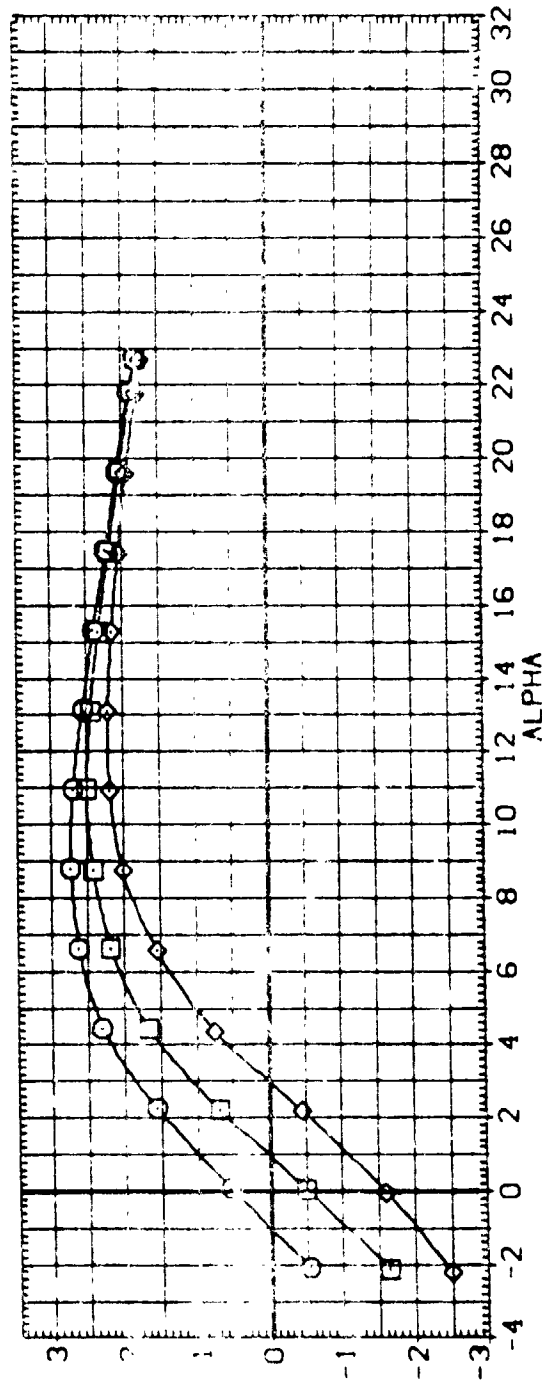
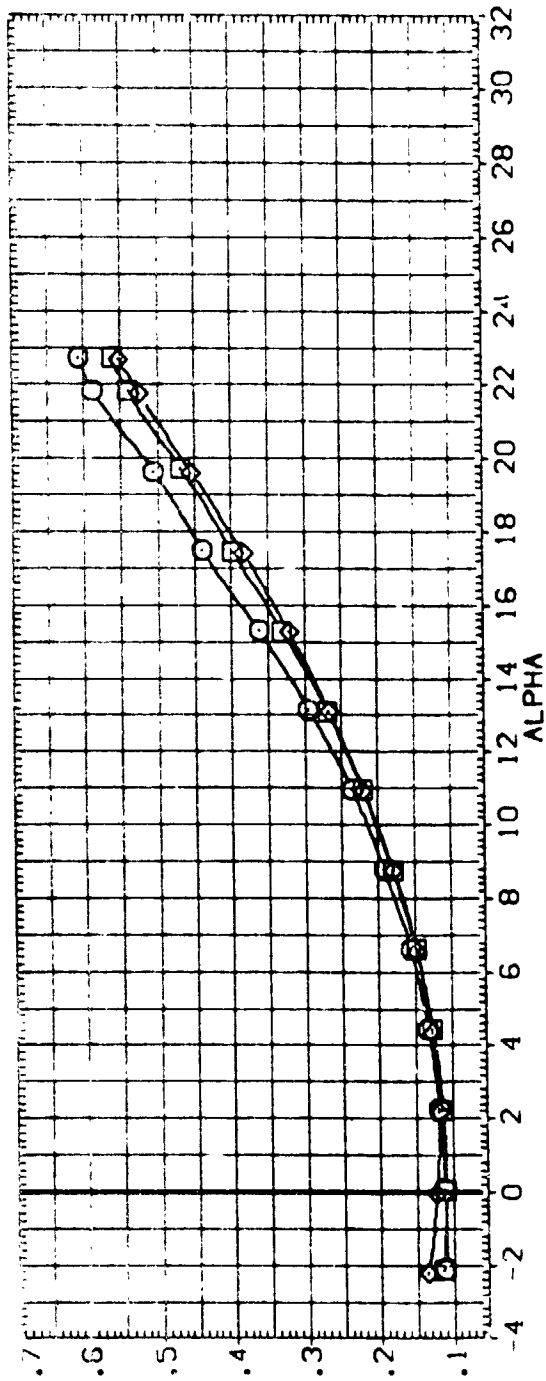


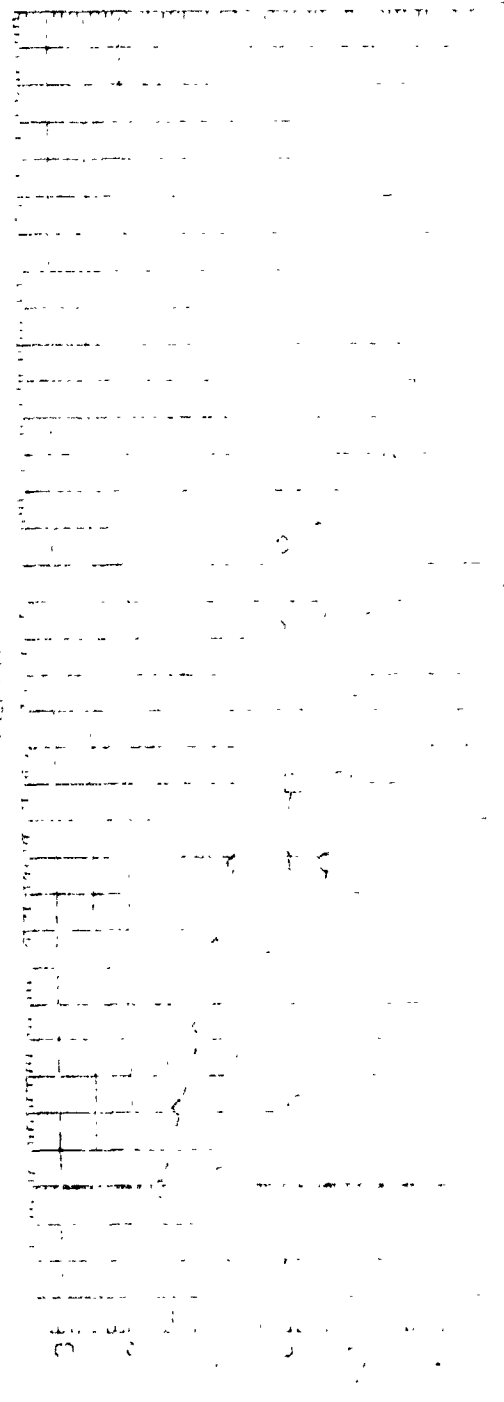
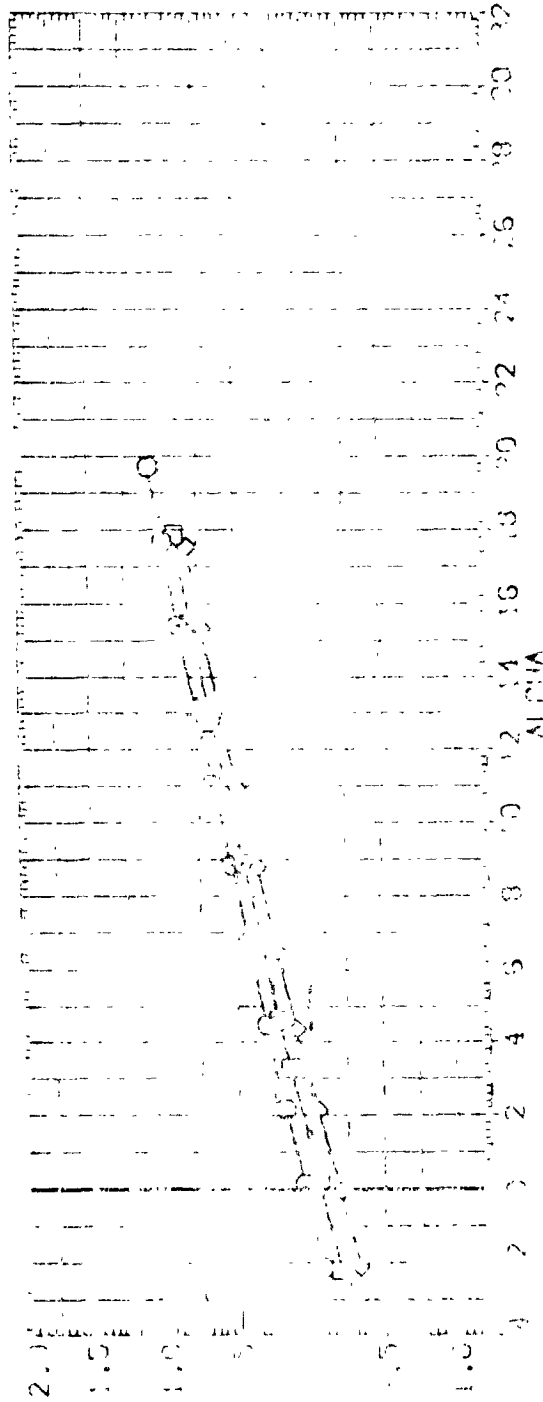
FIGURE 4. FULL SPAN ELEVON PITCH CHARACTERISTICS

(F)MACH = .95

DATA SET SYMB. CONFIGURATION DESCRIPTION

(A) (001) LA-48 8-FT PT 600 RI-06 8-FT 139 549 SPL IT ELEVATION
 (A) (005) LA-48 8-FT PT 600 RI-06 8-FT 139 549 SPL IT ELEVATION
 (A) (005) LA-48 8-FT PT 600 RI-06 8-FT 139 549 SPL IT ELEVATION

ELV-L3 ELV-L1 ELV-R1 ELV-R0
 .000 .000 .000 .000
 -10,000 -10,000 -10,000 -10,000
 -20,000 -20,000 -20,000 -20,000



00

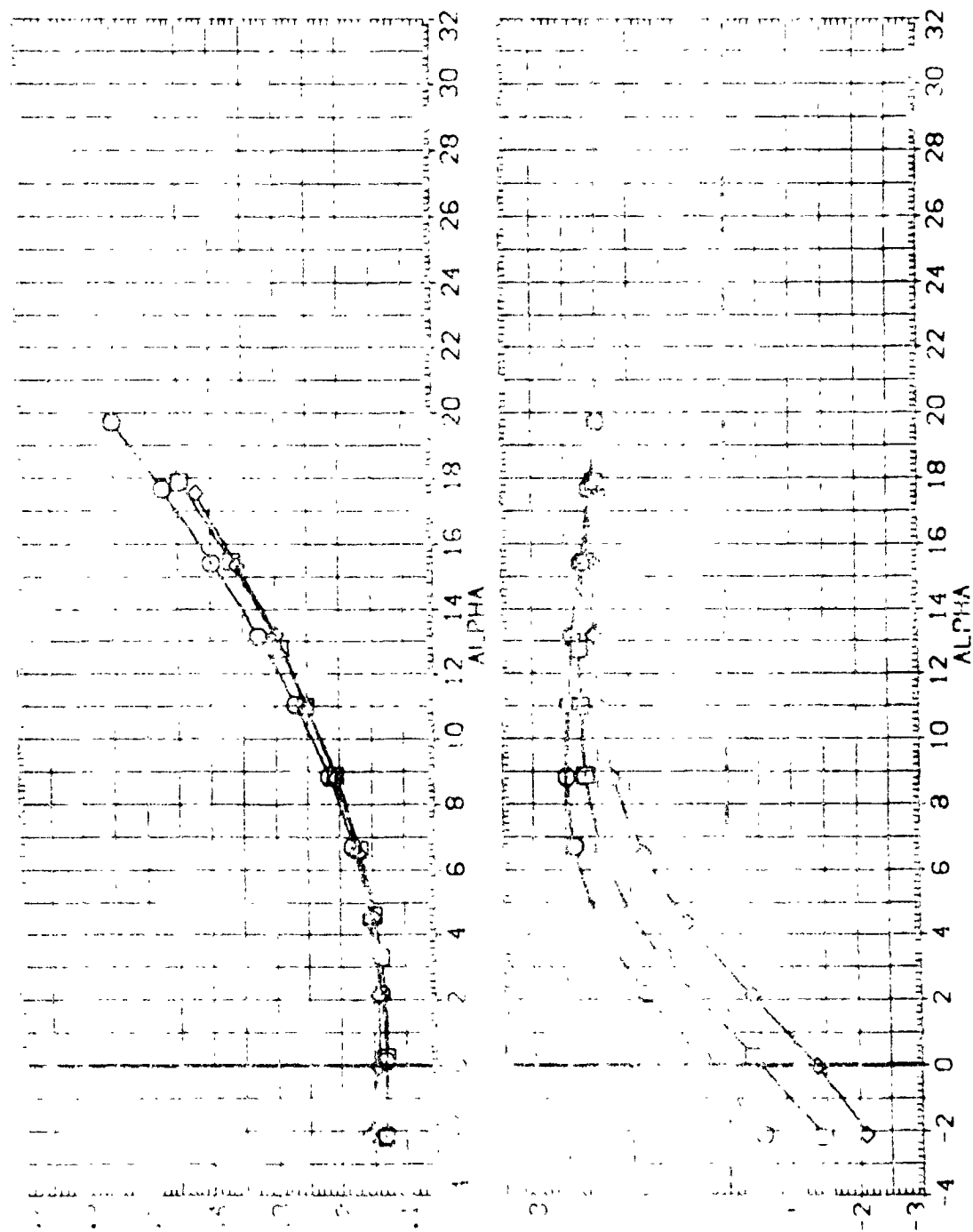


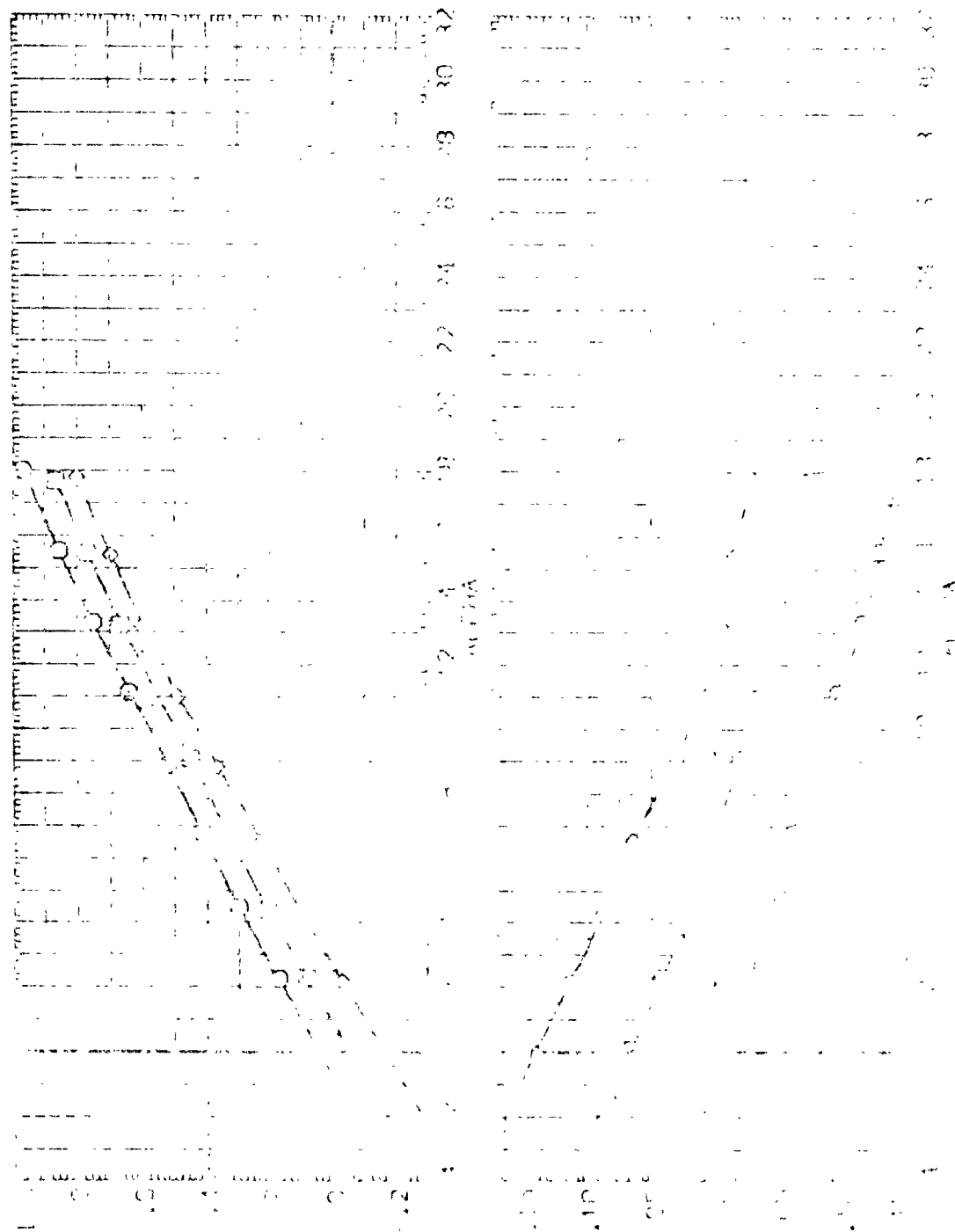
FIGURE 4. FULL SPAN ELEVEN PITCH CHARACTERISTICS

$$(G)_{MACH} = .98$$

1957



	ELV-L0	ELV-L1	ELV-R1	ELV-R0
0	0	0	0	0
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
7	0	0	0	0
8	0	0	0	0
9	0	0	0	0
10	0	0	0	0
11	0	0	0	0
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DATA SET NAME	CONCISE DESCRIPTION	FILE	FILE	FILE
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DATA SET 4	FILE 4	FILE 4	FILE 4	FILE 4
DATA SET 5	FILE 5	FILE 5	FILE 5	FILE 5
DATA SET 6	FILE 6	FILE 6	FILE 6	FILE 6
DATA SET 7	FILE 7	FILE 7	FILE 7	FILE 7
DATA SET 8	FILE 8	FILE 8	FILE 8	FILE 8
DATA SET 9	FILE 9	FILE 9	FILE 9	FILE 9
DATA SET 10	FILE 10	FILE 10	FILE 10	FILE 10
DATA SET 11	FILE 11	FILE 11	FILE 11	FILE 11
DATA SET 12	FILE 12	FILE 12	FILE 12	FILE 12
DATA SET 13	FILE 13	FILE 13	FILE 13	FILE 13
DATA SET 14	FILE 14	FILE 14	FILE 14	FILE 14
DATA SET 15	FILE 15	FILE 15	FILE 15	FILE 15
DATA SET 16	FILE 16	FILE 16	FILE 16	FILE 16
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DATA SET 71	FILE			

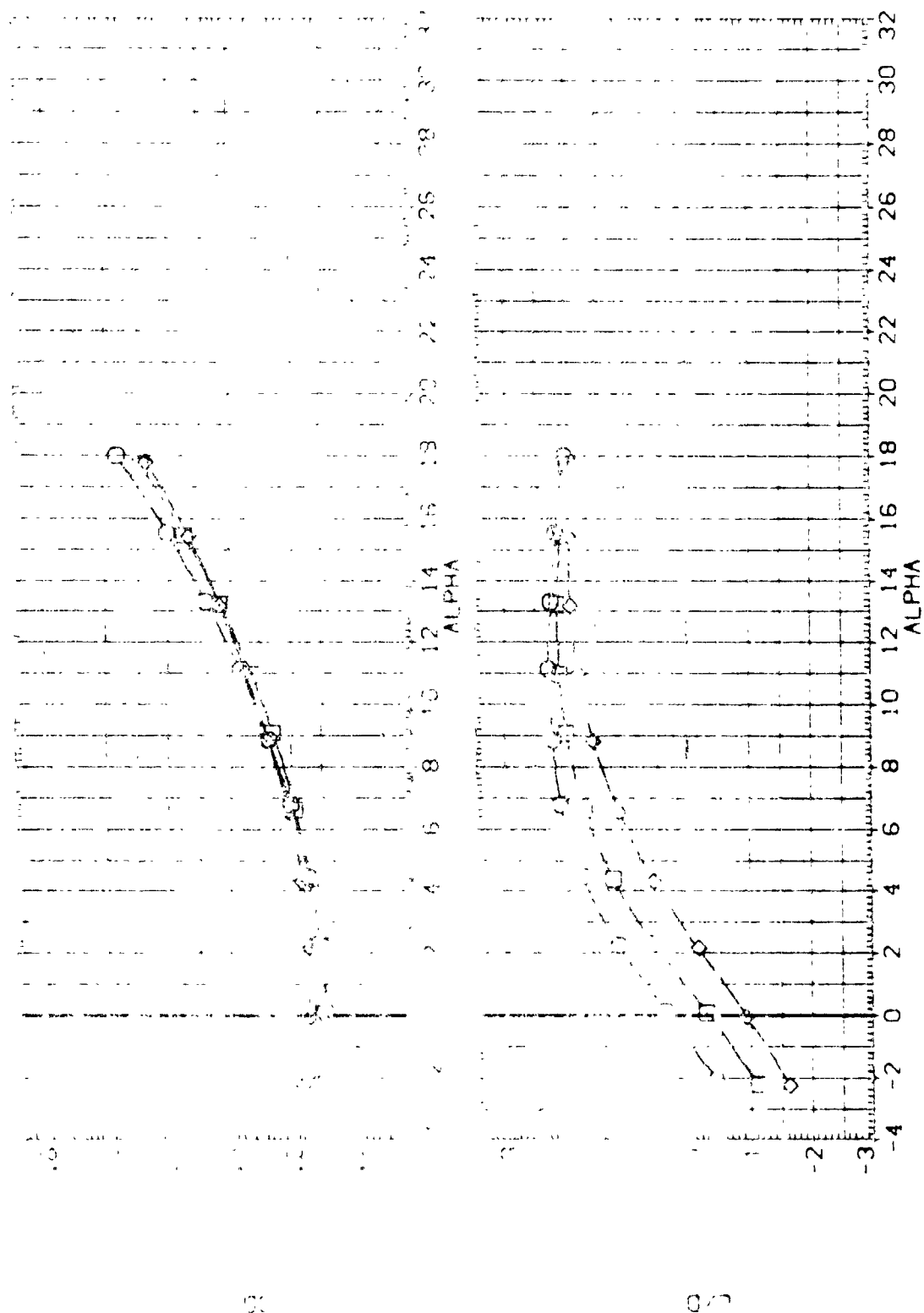


FIGURE 4. FULL SPAN ELEVEN PITCH CHARACTERISTICS
(H)MACH = 1.08



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-LD	ELV-LI	ELV-RI	ELV-RD
(AHL001)	CA-19 8-FT 19T 060 RI 0608/179 078	0.000	0.000	0.000	0.000
(AHL002)	CA-19 8-FT 19T 060 RI 0608/179 078	0.000	0.000	0.000	0.000
(AHL003)	CA-48 8-FT 19T 060 RI 0608/179 078	0.000	0.000	0.000	0.000
(AHL004)	CA-48 8-FT 19T 060 RI 0608/179 078	0.000	0.000	0.000	0.000

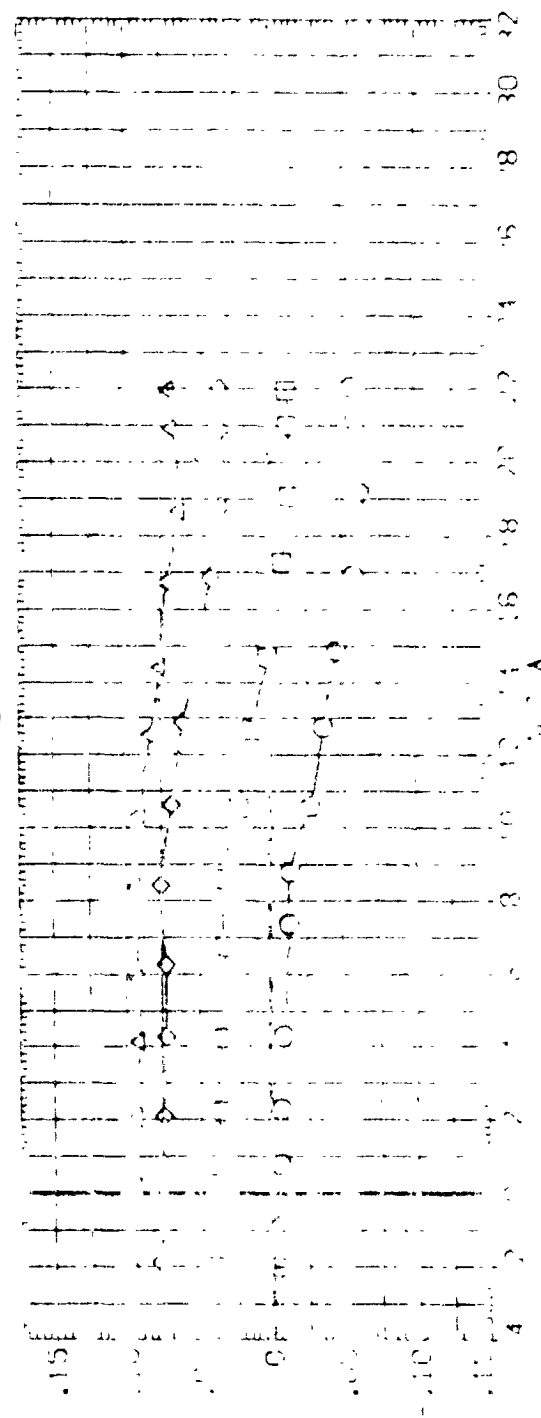
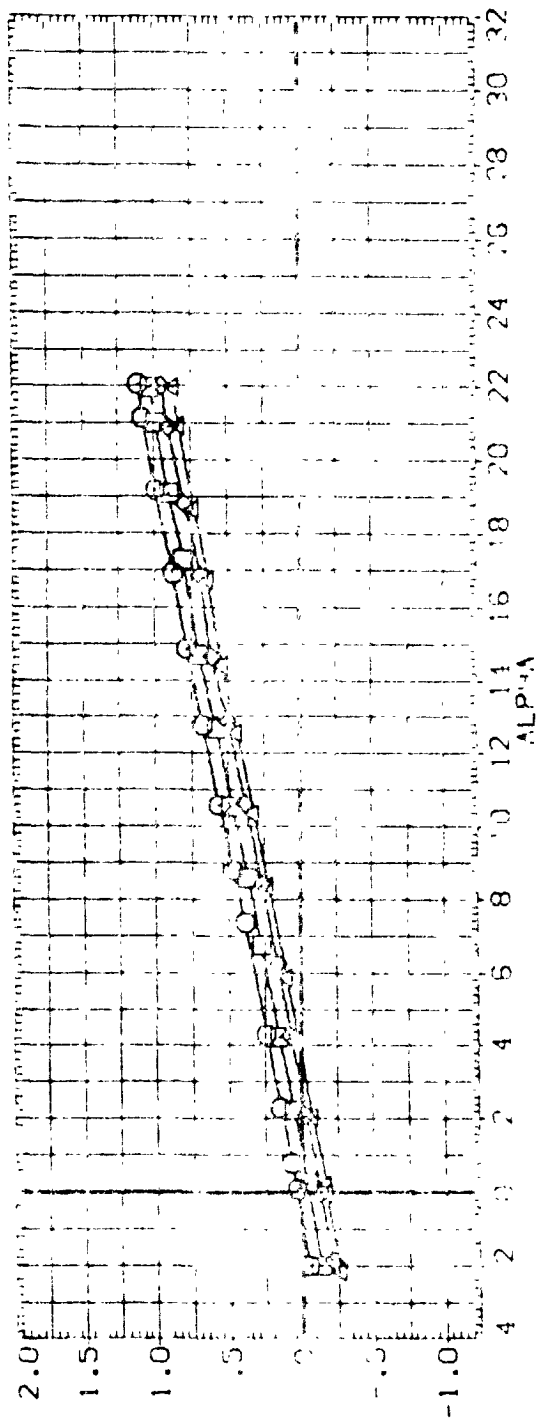


FIGURE 1. CL vs ALPHA PITCH (0.001) (0.001)

(AHL001)

DATA SET SYMBOL CONFIGURATION DESCRIPTION LA-18 3-FT TPT 680 RI-0898/139 078 SPL IT ELEVON ELV-L0 ELV-R1 ELV-R0
 (AH1001) LA-18 3-FT TPT 680 RI-0898/139 078 SPL IT ELEVON 000 000 000
 (AH1002) LA-18 3-FT TPT 680 RI-0898/139 078 SPL IT ELEVON 000 000 000
 (AH1003) LA-18 3-FT TPT 680 RI-0898/139 078 SPL IT ELEVON 000 000 000
 (AH1004) LA-18 3-FT TPT 680 RI-0898/139 078 SPL IT ELEVON 000 000 000

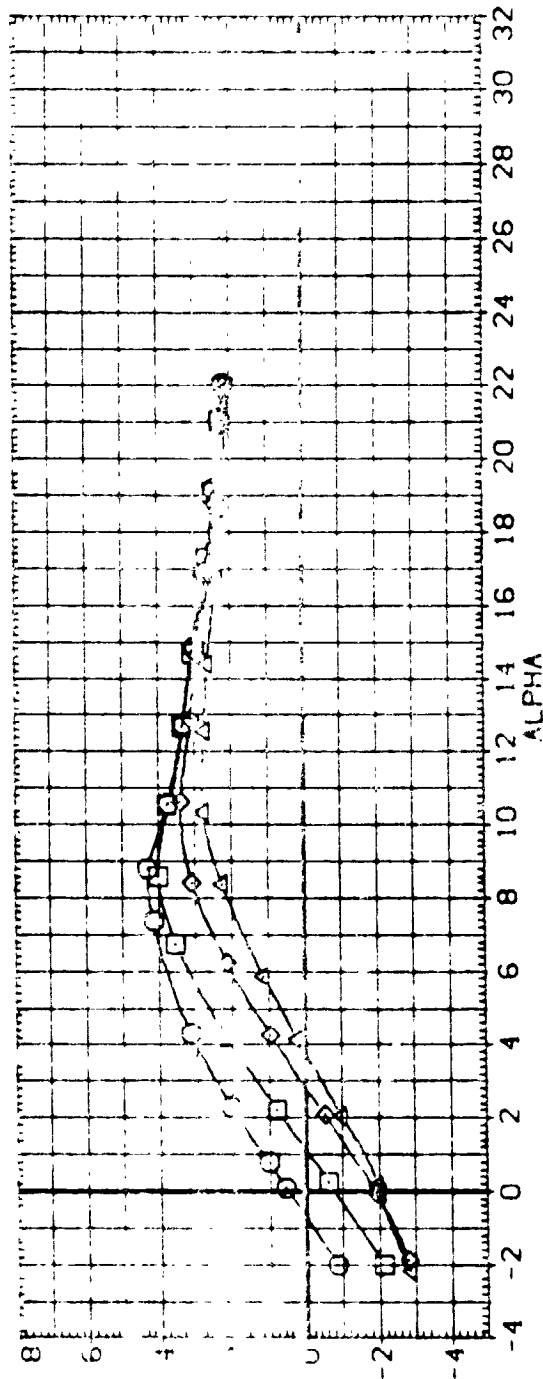
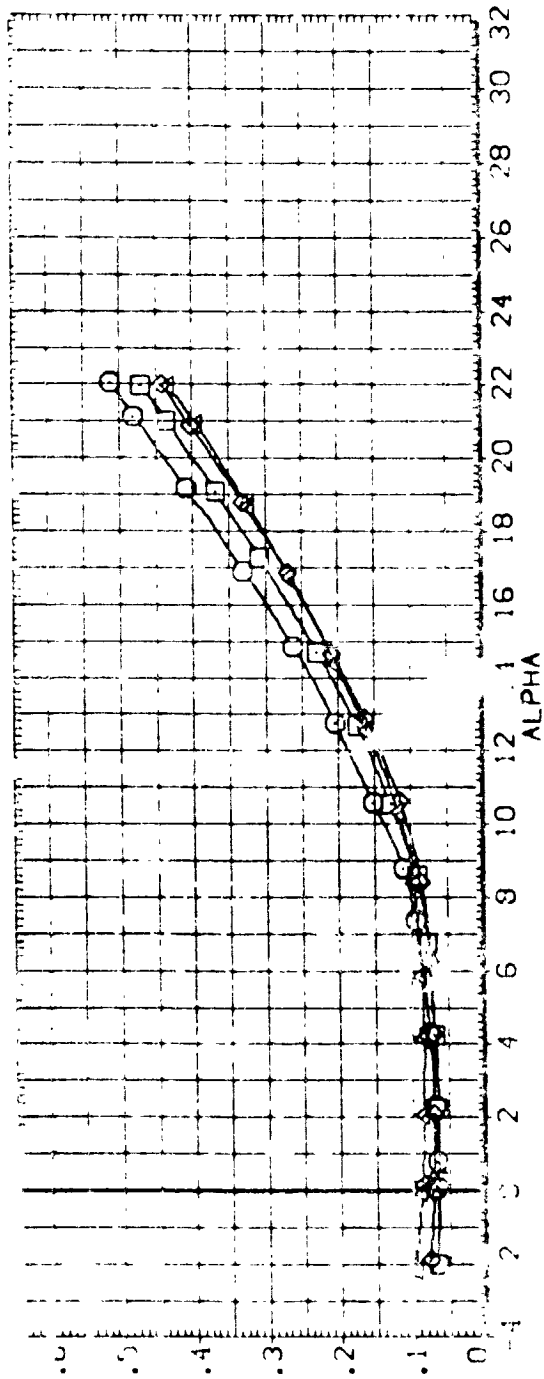


FIGURE 5. INBOARD ELEVON PITCH CHARACTERISTICS

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0
(A11001)	□	LA-48 8-FT TPT 680 RI-0858/139 098 SPLTY ELEVON	.000	.000	.000	.000
(A11002)	◇	LA-48 8-FT TPT 680 RI-0858/139 098 SPLTY ELEVON	.000	-10.000	-10.000	.000
(A11003)	△	LA-48 8-FT TPT 680 RI-0858/139 098 SPLTY ELEVON	.000	-20.000	-20.000	.000
(A11004)	×	LA-48 8-FT TPT 680 RI-0858/139 098 SPLTY ELEVON	.000	-30.000	-30.000	.000

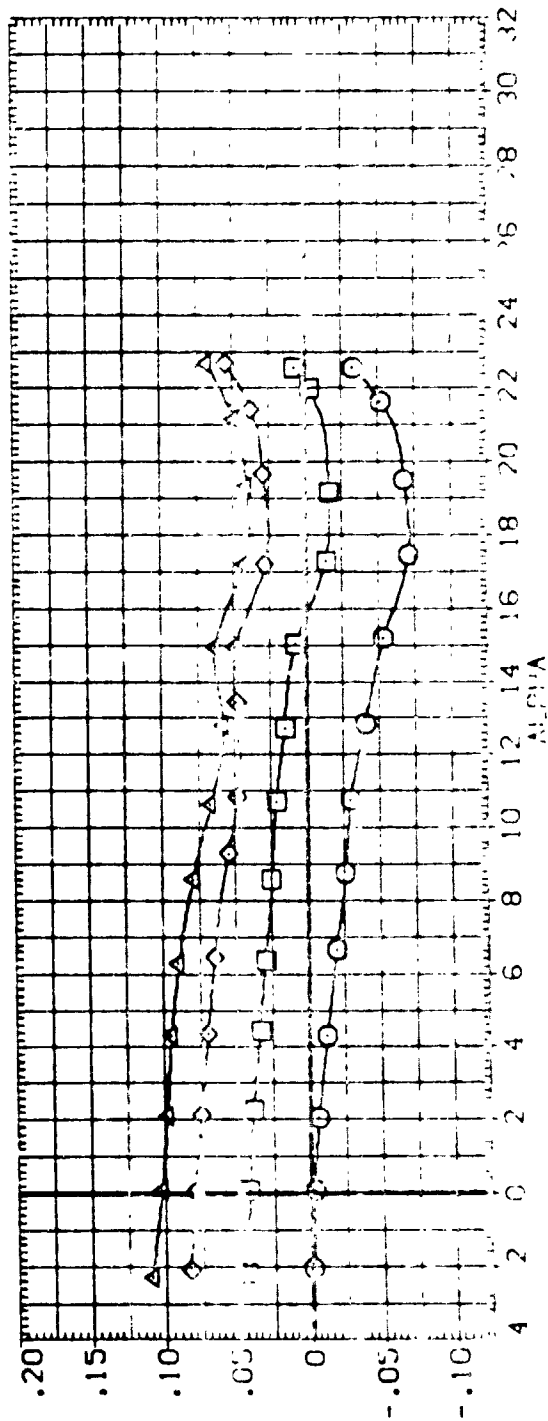
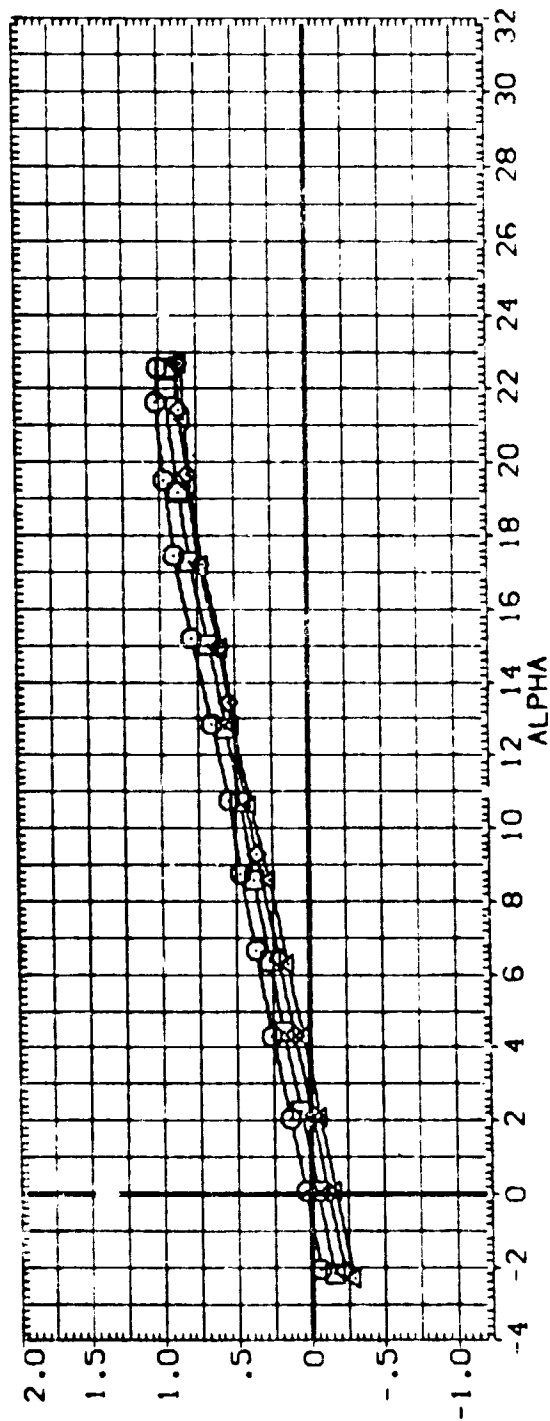


FIGURE 5. LA-48 8-FT TPT 680 RI-0858/139 098 SPLTY ELEVON

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-LG	ELV-LI	ELV-RI	ELV-RG
(AH1001)	LA-48 3 FT 19T 680 RI-0898/139 088 SPLIT ELEVON	.000	(14)	.000	.000
(AH1002)	LA-48 3 FT 19T 680 RI-0898/139 088 SPLIT ELEVON	.000	(14)	.000	.000
(AH1003)	LA-48 8 FT 19T 680 RI-0898/139 088 SPLIT ELEVON	.000	(14)	.000	.000
(AH1004)	LA-48 8 FT 19T 680 RI-0898/139 088 SPLIT ELEVON	.000	(14)	.000	.000

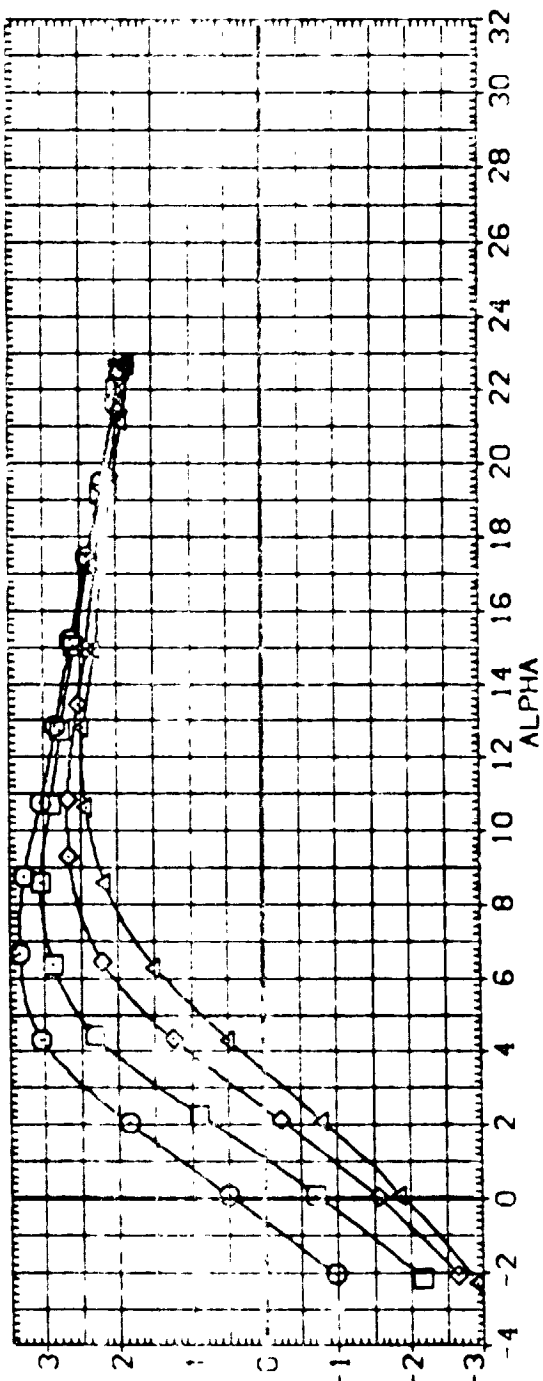
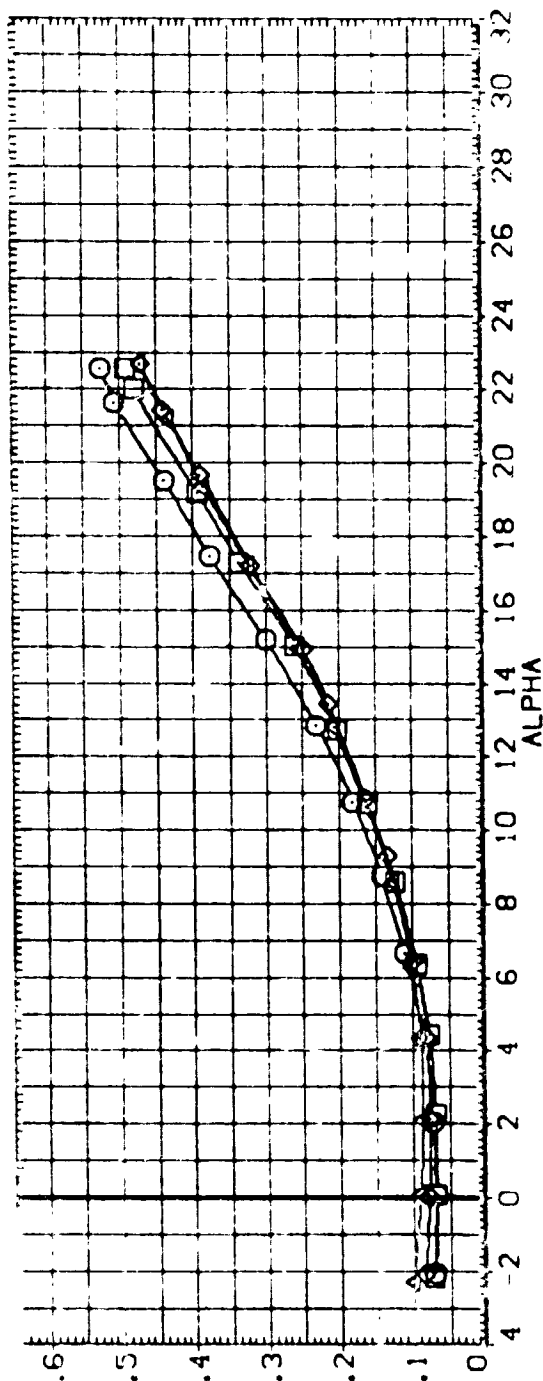


FIGURE 5. INBOARD ELEVON PITCH CHARACTERISTICS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0
(AH1001)	LA-48 8-FT TPT 680 RI-0698/135 DR8 SPLIT ELEVON	.000	.000	.000	.000
(AH1002)	LA-48 8-FT TPT 680 RI-0698/135 DR8 SPLIT ELEVON	.000	-10.000	-10.000	.000
(AH1003)	LA-48 8-FT TPT 680 RI-0698/135 DR8 SPLIT ELEVON	.000	-20.000	-20.000	.000
(AH1004)	LA-48 8-FT TPT 680 RI-0698/135 DR8 SPLIT ELEVON	.000	-30.000	-30.000	.000

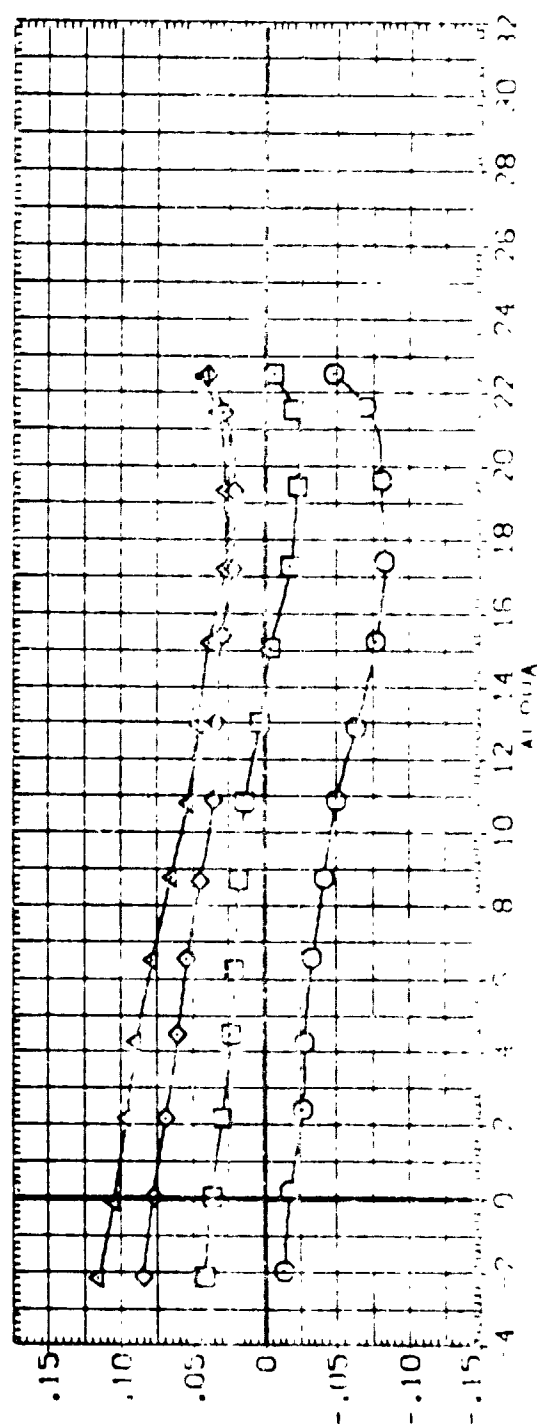
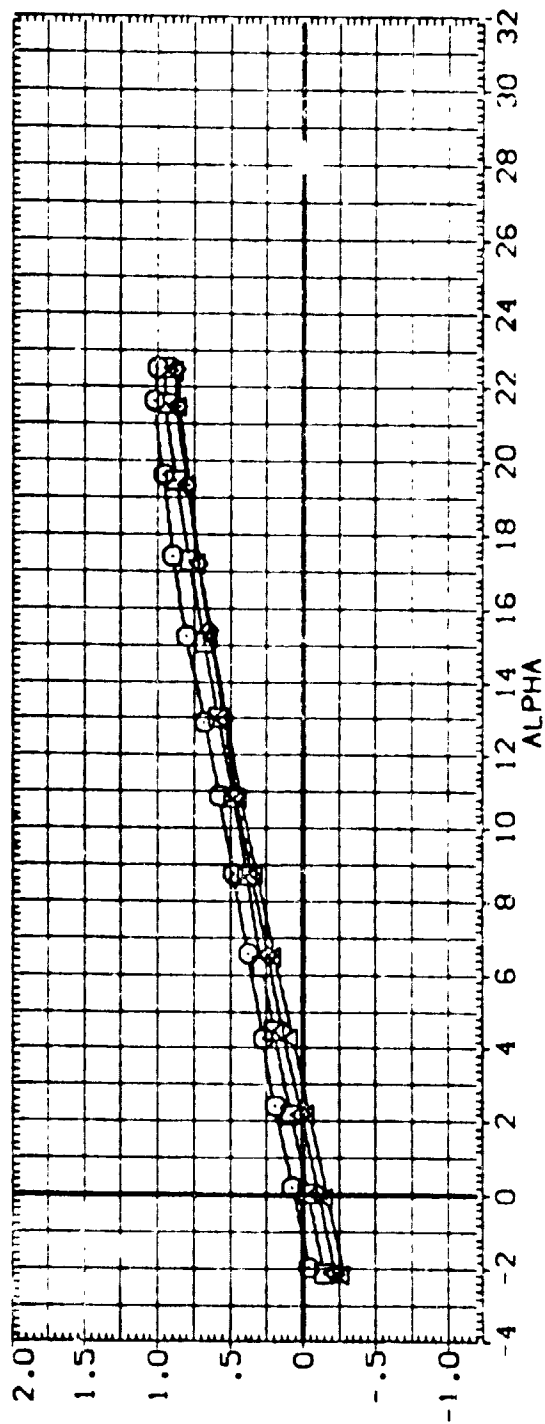


FIGURE 5. FORCE COEFFICIENTS FOR LA-48 8-FT TPT 680 RI-0698/135 DR8 SPLIT ELEVON

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	LA-48 8-FT TPI	890 RI	0898/138	048	SA 11 ELEVON	ELV-LO	ELV-CL	ELV-RI	ELV-R2
[AM1001]	LA-48 8-FT TPI	890 RI	0898/138	048	SA 11 ELEVON	0.00	0.00	0.00	0.00	0.00
[AM1002]	LA-48 8-FT TPI	890 RI	0898/138	048	SA 11 ELEVON	0.00	0.00	0.00	0.00	0.00
[AM1003]	LA-48 8-FT TPI	890 RI	0898/138	048	SA 11 ELEVON	0.00	0.00	0.00	0.00	0.00
[AM1004]	LA-48 8-FT TPI	890 RI	0898/138	048	SA 11 ELEVON	0.00	0.00	0.00	0.00	0.00

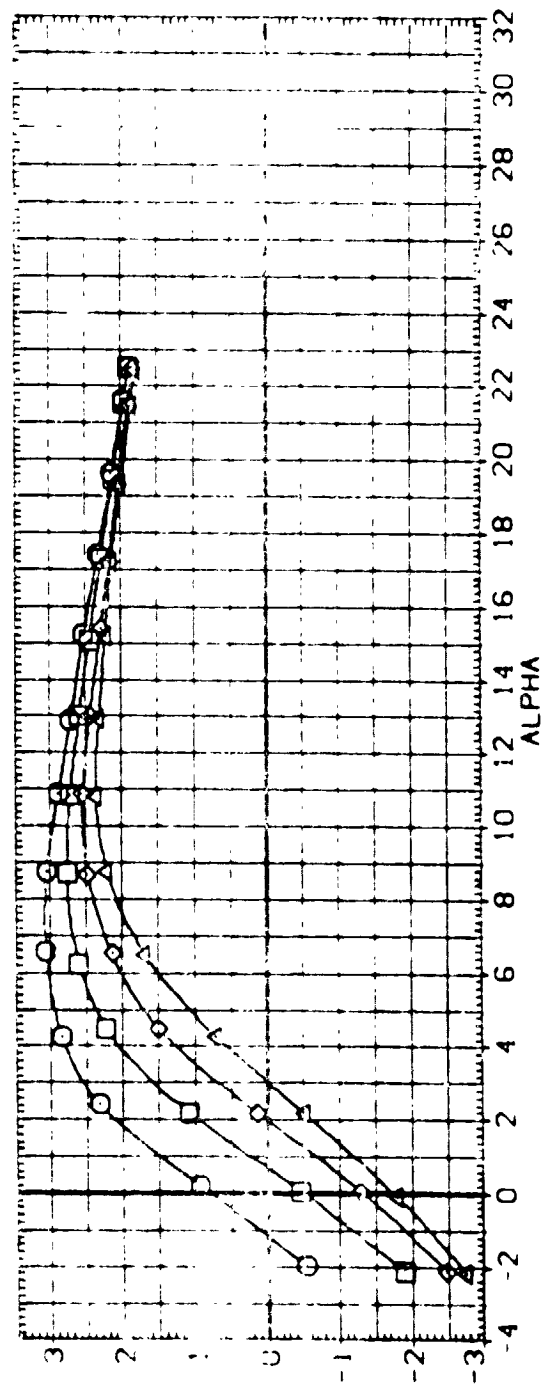
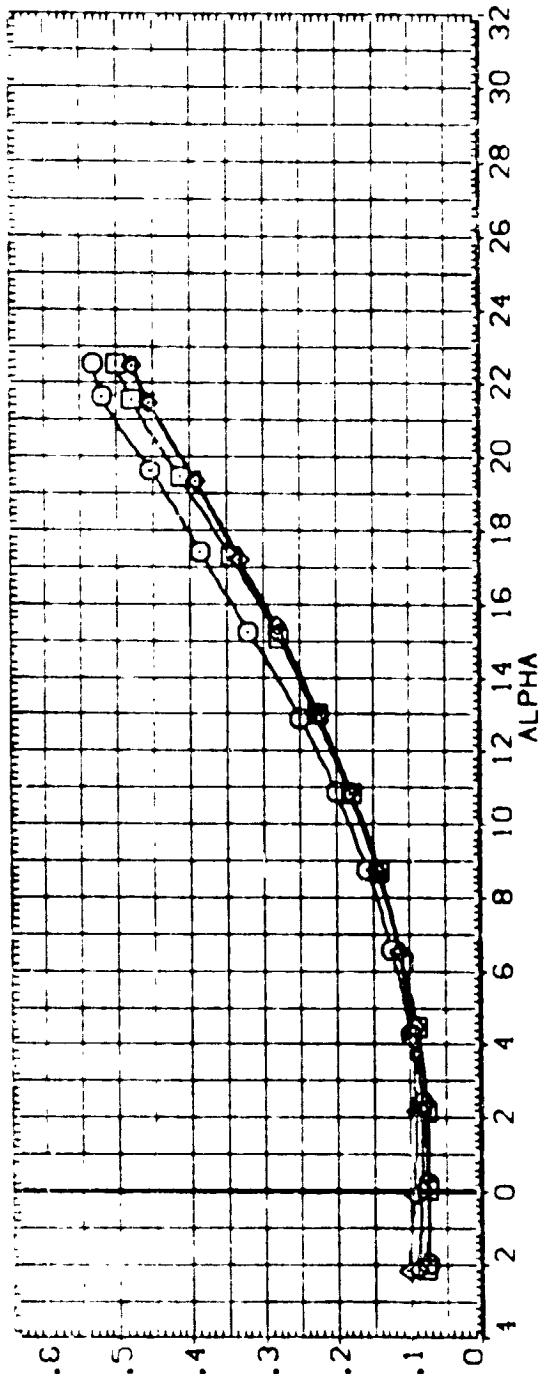
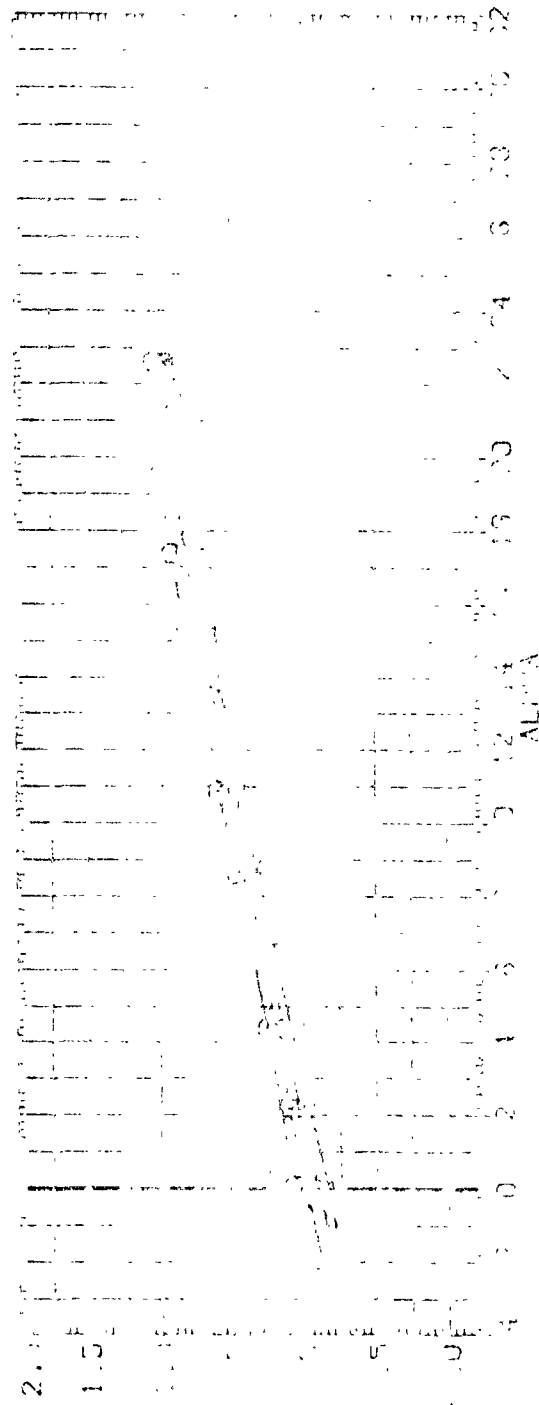


FIGURE 5. INBOARD ELEVON PITCH CHARACTERISTICS

(C)MACH = .85

DATA SET SINGLES CONFIGURATION, DESCRIPTION
 (A11001) LA-13 8-FT 1ST 500 RINGS 13 8-FT 1ST 500 RINGS ELEVATION ELEV-13 ELEV-11 ELEV-00
 (A11002) LA-13 3-FT 1ST 500 RINGS 13 3-FT 1ST 500 RINGS ELEVATION 10,000 10,000 10,000
 (A11003) LA-13 1-FT 1ST 500 RINGS 13 1-FT 1ST 500 RINGS ELEVATION 20,000 20,000 20,000
 (A11004) LA-13 8-FT 1ST 500 RINGS 13 8-FT 1ST 500 RINGS ELEVATION 30,000 30,000 30,000



LA-13 1-FT 1ST 500 RINGS

LA-13 8-FT 1ST 500 RINGS

1.0
 0.8
 0.6
 0.4
 0.2
 0.0
 -0.2
 -0.4
 -0.6
 -0.8
 -1.0

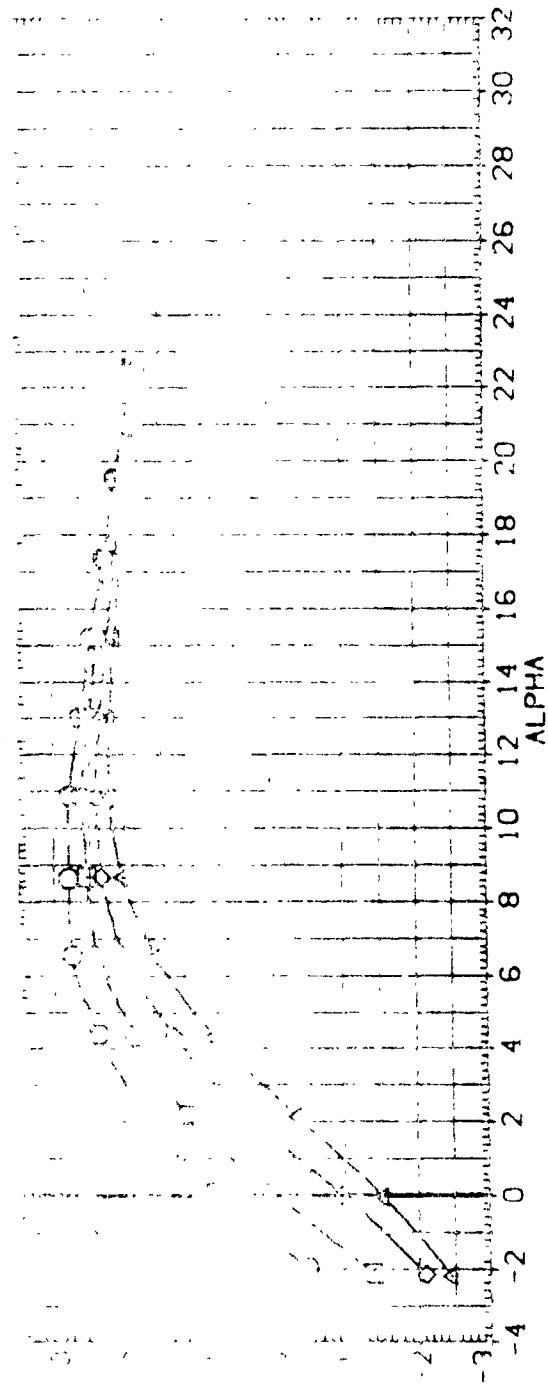
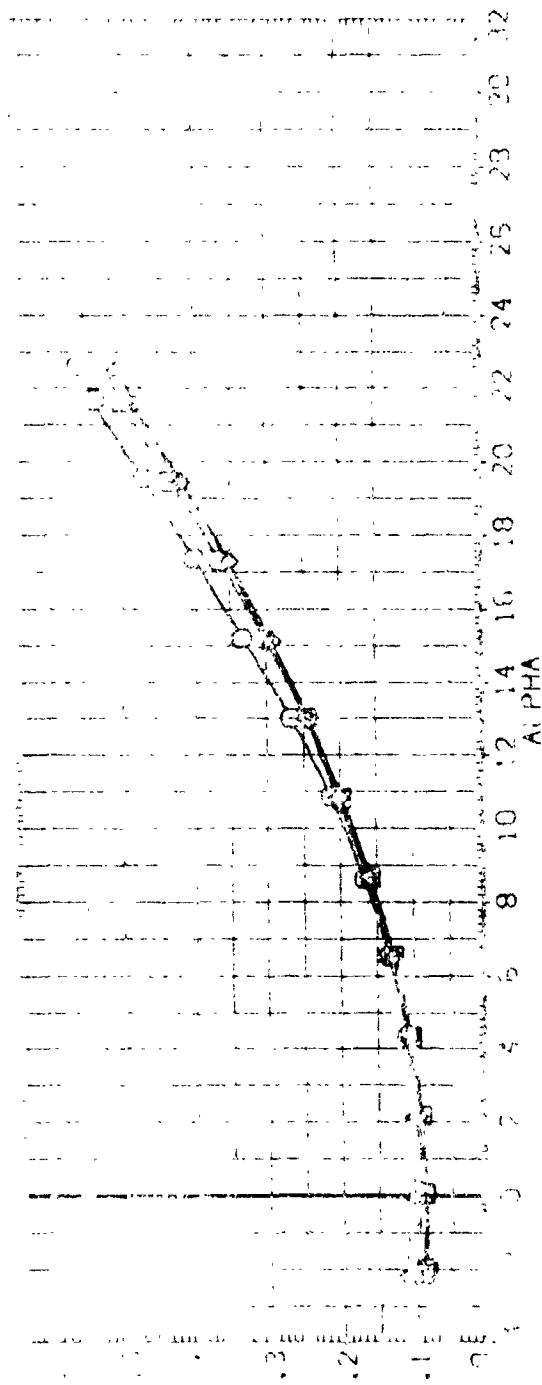


FIGURE 5. INBOARD ELEVON PITCH CHARACTERISTICS

(O)MACH = .90

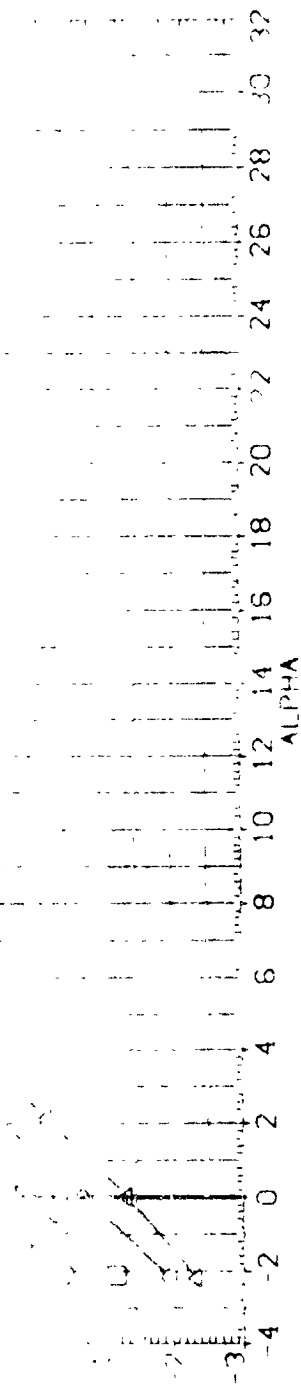


FIGURE 5. INBOARD ELEVEN PITCH CHARACTERISTICS

$$(E)MACH = .92$$

DATA SET SYMBOL COORDINATE DESCRIPTION ELEVATION ELEV-LO ELEV-LI ELEV-RI ELEV-RO

DATA SET SYMBOL	COORDINATE DESCRIPTION	ELEVATION	ELEV-LO	ELEV-LI	ELEV-RI	ELEV-RO
(A1)001	1000	1000	1000	1000	1000	1000
(A1)002	1000	1000	1000	1000	1000	1000
(A1)003	1000	1000	1000	1000	1000	1000
(A1)004	1000	1000	1000	1000	1000	1000

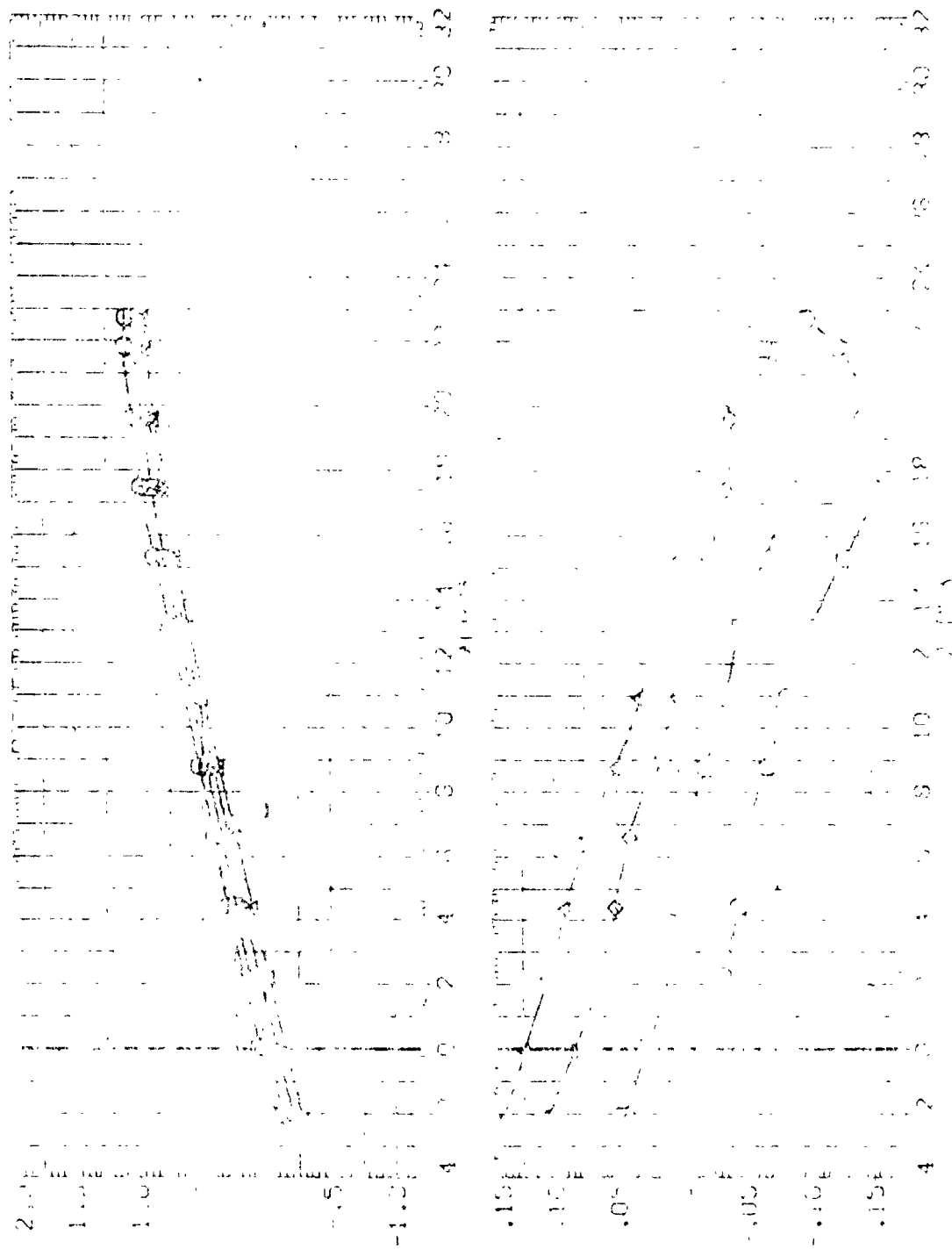


FIGURE 5. ELEVATION PROFILE GRAPH

(A1)001

1. SET 5.01 10. 10.00 10.00 10.00
 2. 10.00 10.00 10.00 10.00
 3. 10.00 10.00 10.00 10.00
 4. 10.00 10.00 10.00 10.00
 5. 10.00 10.00 10.00 10.00
 6. 10.00 10.00 10.00 10.00
 7. 10.00 10.00 10.00 10.00
 8. 10.00 10.00 10.00 10.00
 9. 10.00 10.00 10.00 10.00
 10. 10.00 10.00 10.00 10.00

377

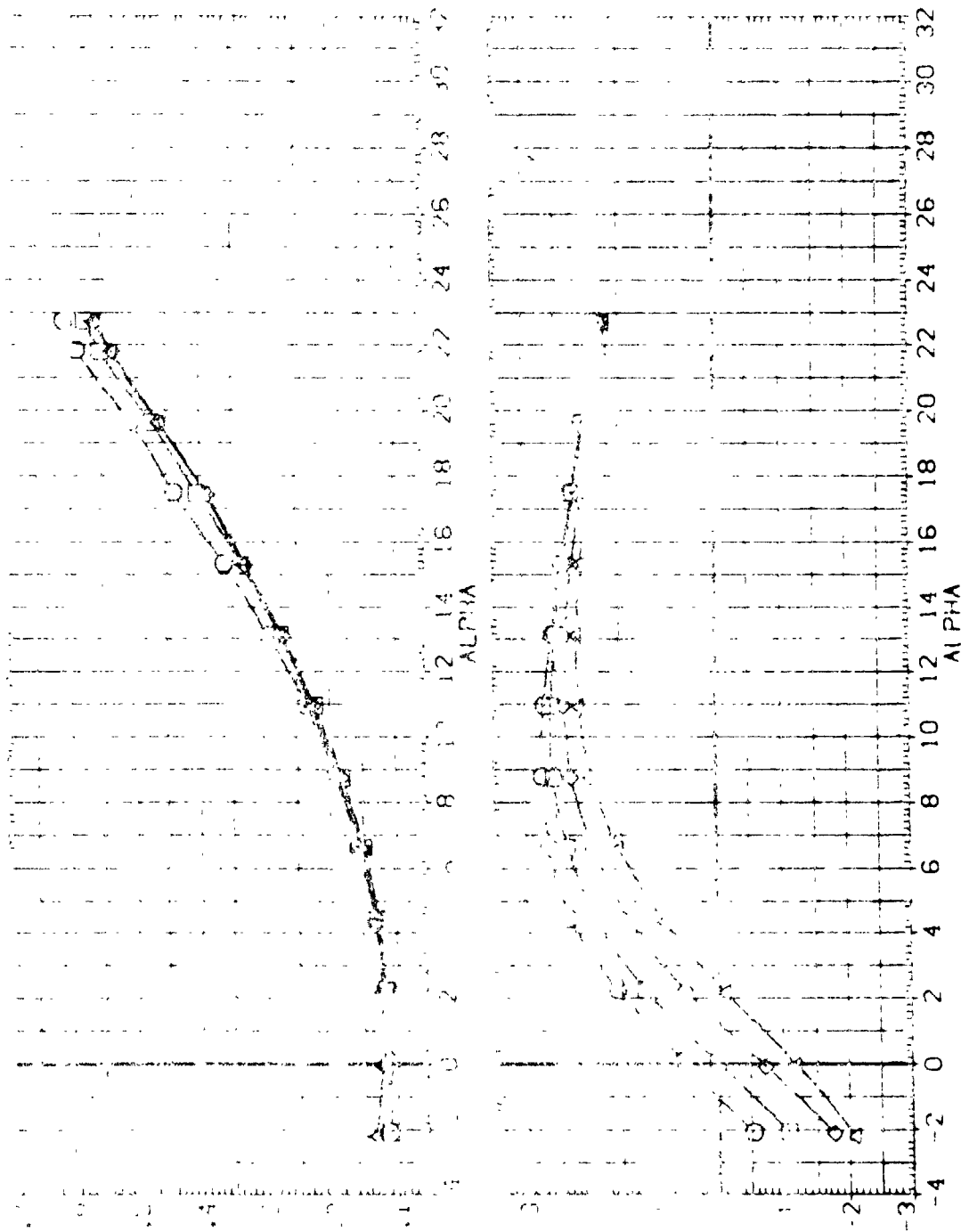


FIGURE 5. BOARD ELEVON PITCH CHARACTERISTICS
 (F)MACH = .95

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L3	ELV-L1	ELV-R1	ELV-R3
(AH1001)	LA-43 8 FT 121 690 RI 1058/125	.000	.000	.000	.000
(AH1002)	LA-43 8 FT 121 690 RI 1058/125	.000	.000	.000	.000
(AH1003)	LA-43 8 FT 121 690 RI 1058/125	.000	.000	.000	.000
(AH1004)	LA-43 8 FT 121 690 RI 1058/125	.000	.000	.000	.000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L3	ELV-L1	ELV-R1	ELV-R3
(AH1001)	LA-43 8 FT 121 690 RI 1058/125	.000	.000	.000	.000
(AH1002)	LA-43 8 FT 121 690 RI 1058/125	.000	.000	.000	.000
(AH1003)	LA-43 8 FT 121 690 RI 1058/125	.000	.000	.000	.000
(AH1004)	LA-43 8 FT 121 690 RI 1058/125	.000	.000	.000	.000

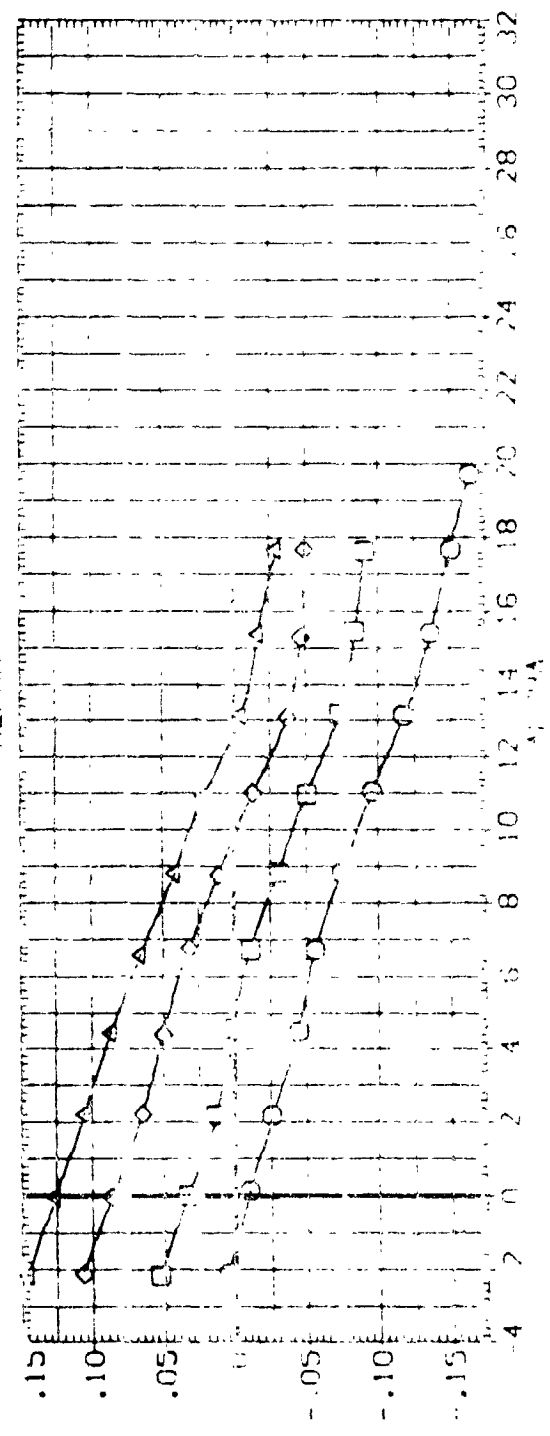
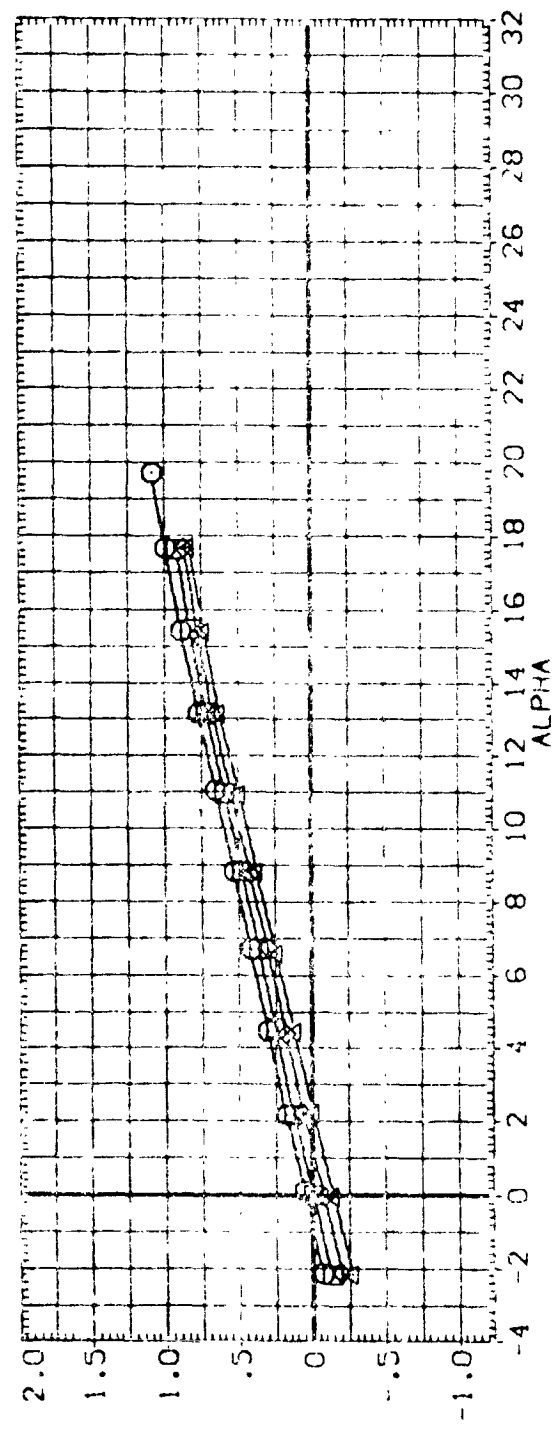
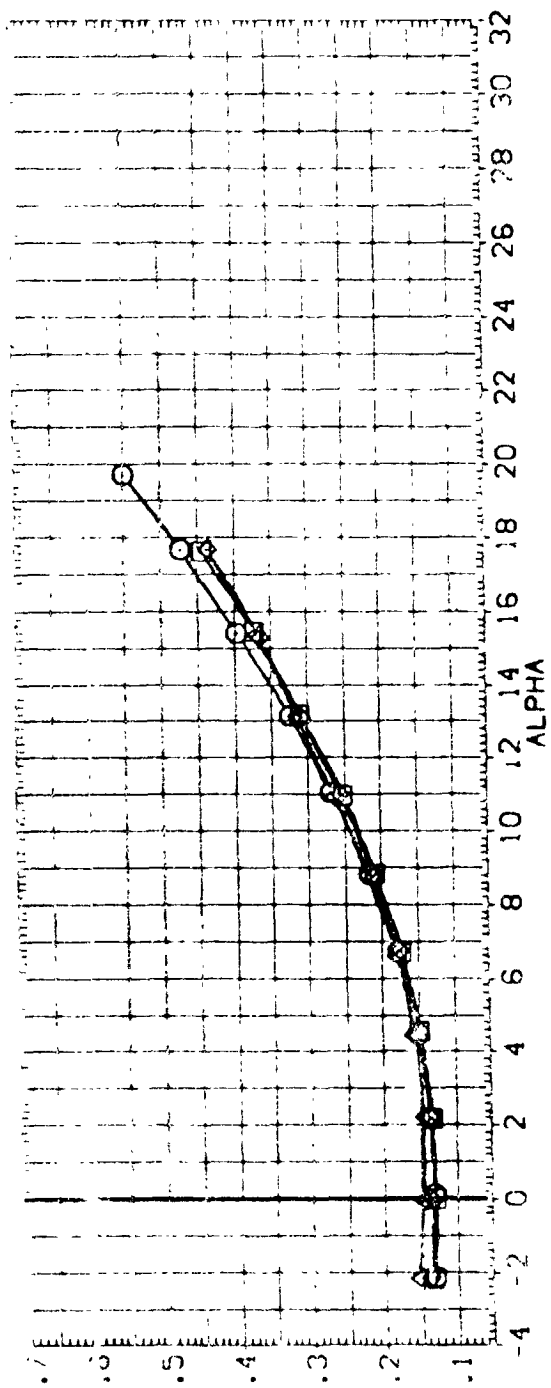


FIGURE 9. PLOT OF ELEVATION PI OF CHARACTERISTICS

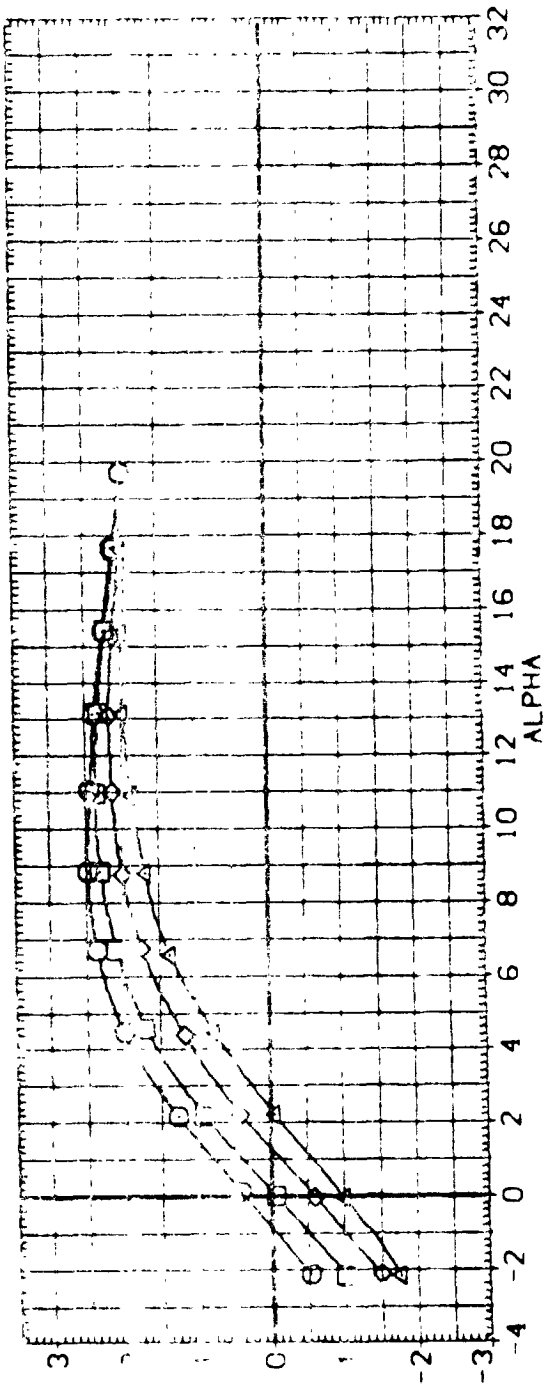
COMACH

DATA SET SYMBOL CONFIGURATION DESCRIPTION

LA-18	8 FT	180	RI-0888/123	0x8	SPLIT	ELEVON		
(A11001)	Q	LA-18 <td>8 FT <td>180 <td>RI-0888/123 <td>0x8</td> <td>SPLIT</td> <td>ELEVON</td> </td></td></td>	8 FT <td>180 <td>RI-0888/123 <td>0x8</td> <td>SPLIT</td> <td>ELEVON</td> </td></td>	180 <td>RI-0888/123 <td>0x8</td> <td>SPLIT</td> <td>ELEVON</td> </td>	RI-0888/123 <td>0x8</td> <td>SPLIT</td> <td>ELEVON</td>	0x8	SPLIT	ELEVON
(A11002)	X	LA-18 <td>8 FT <td>180 <td>RI-0888/123 <td>0x8</td> <td>SPLIT</td> <td>ELEVON</td> </td></td></td>	8 FT <td>180 <td>RI-0888/123 <td>0x8</td> <td>SPLIT</td> <td>ELEVON</td> </td></td>	180 <td>RI-0888/123 <td>0x8</td> <td>SPLIT</td> <td>ELEVON</td> </td>	RI-0888/123 <td>0x8</td> <td>SPLIT</td> <td>ELEVON</td>	0x8	SPLIT	ELEVON
(A11003)	X	LA-18 <td>8 FT <td>180 <td>RI-0888/123 <td>0x8</td> <td>SPLIT</td> <td>ELEVON</td> </td></td></td>	8 FT <td>180 <td>RI-0888/123 <td>0x8</td> <td>SPLIT</td> <td>ELEVON</td> </td></td>	180 <td>RI-0888/123 <td>0x8</td> <td>SPLIT</td> <td>ELEVON</td> </td>	RI-0888/123 <td>0x8</td> <td>SPLIT</td> <td>ELEVON</td>	0x8	SPLIT	ELEVON
(A11004)	A	LA-18 <td>8 FT <td>180 <td>RI-0888/123 <td>0x8</td> <td>SPLIT</td> <td>ELEVON</td> </td></td></td>	8 FT <td>180 <td>RI-0888/123 <td>0x8</td> <td>SPLIT</td> <td>ELEVON</td> </td></td>	180 <td>RI-0888/123 <td>0x8</td> <td>SPLIT</td> <td>ELEVON</td> </td>	RI-0888/123 <td>0x8</td> <td>SPLIT</td> <td>ELEVON</td>	0x8	SPLIT	ELEVON



C_D



L/D

FIGURE 5. INBOARD ELEVON PITCH CHARACTERISTICS

(G)MACH = .98

DATA SET SYMBOL: CONF. QUASION DESCRIPTION

DATA SET SYMBOL	CONF. QUASION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0
[AH1001]	LA-48 8-FT TPT 690 RI -0898/139 098 SPT IT ELEVON	.000	.000	.000	.000
[AH1002]	LA-48 9-FT TPT 690 RI -0898/139 098 SPT IT ELEVON	.000	-10.000	-10.000	.000
[AH1003]	LA-48 8-FT TPT 690 RI -0898/139 098 SPT IT ELEVON	.000	-20.000	-20.000	.000
[AH1004]	LA-48 8-FT TPT 690 RI -0898/139 098 SPT IT ELEVON	.000	-30.000	-30.000	.000

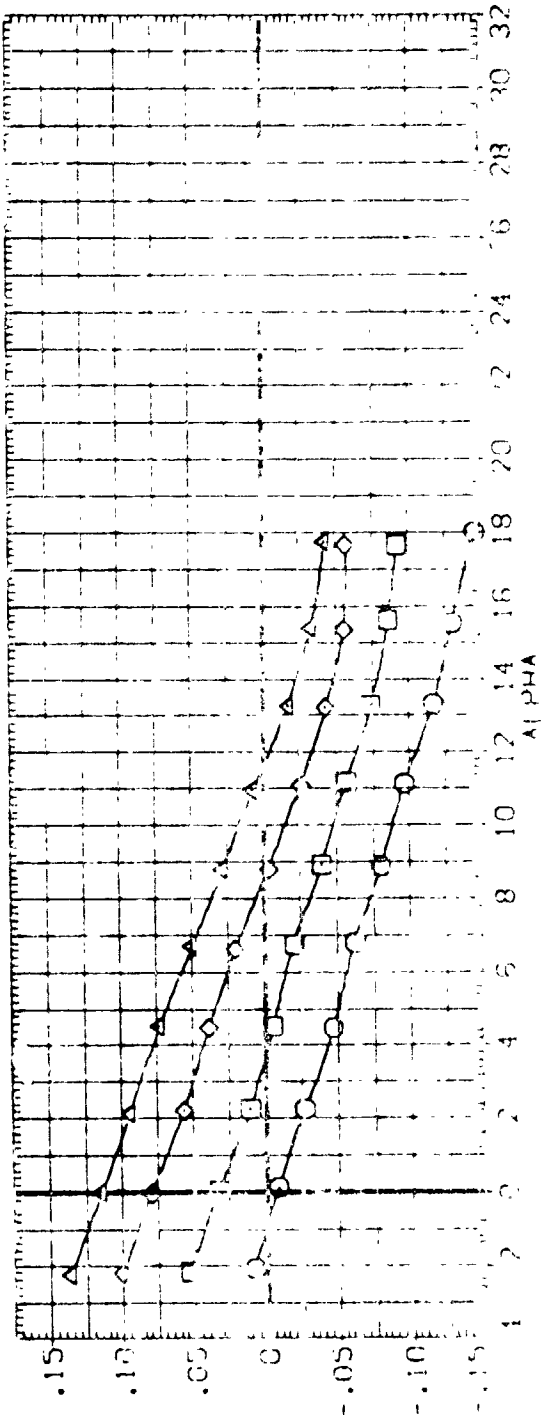
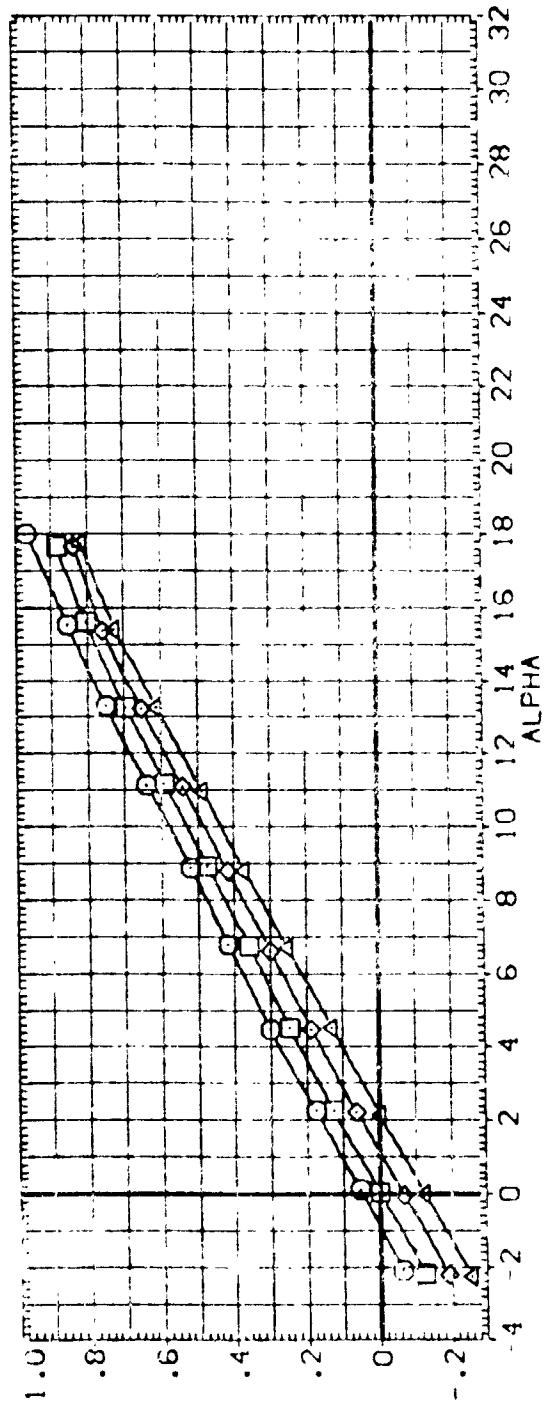


FIGURE 5. (continued) CLM vs ALPHA CHARACTERISTICS

DATA SET SYMBOL CONFIGURATION DESCRIPTION ELEVATION ELEVATION ELEVATION ELEVATION ELEVATION ELEVATION

LA 48 3 FT 181 820 R1-0808/28 048 SPL IT ELEVATION 300 300 300 300 300

LA 48 3 FT 181 820 R1-0808/28 048 SPL IT ELEVATION 300 300 300 300 300

LA 48 3 FT 181 820 R1-0808/28 048 SPL IT ELEVATION 300 300 300 300 300

LA 48 3 FT 181 820 R1-0808/28 048 SPL IT ELEVATION 300 300 300 300 300

LA 48 3 FT 181 820 R1-0808/28 048 SPL IT ELEVATION 300 300 300 300 300

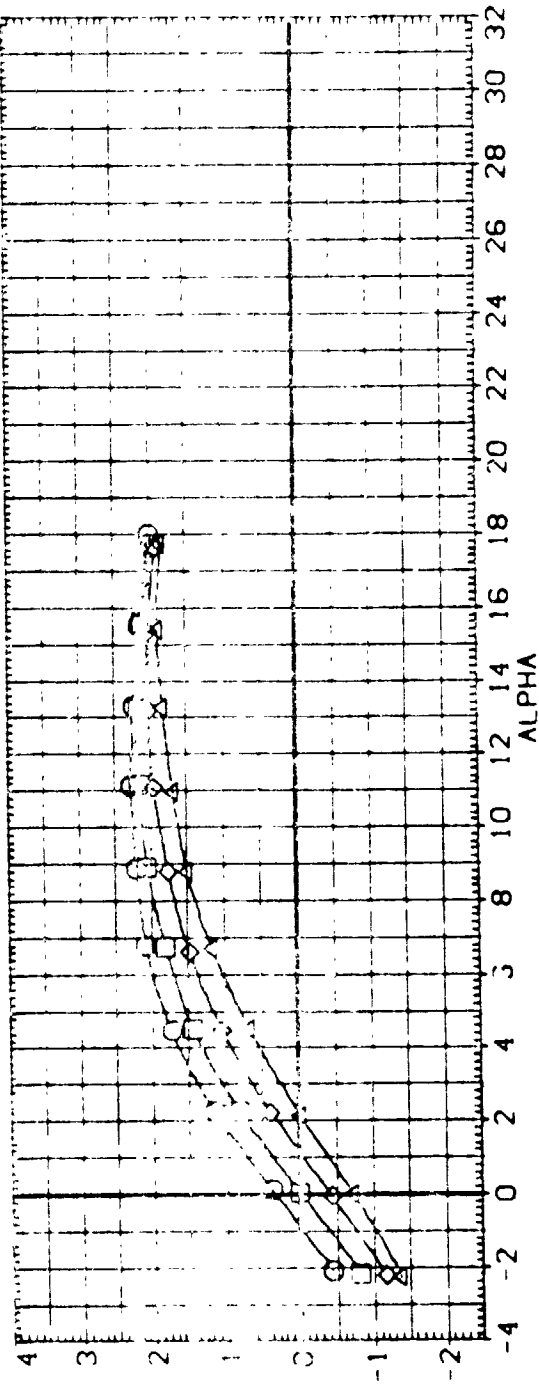
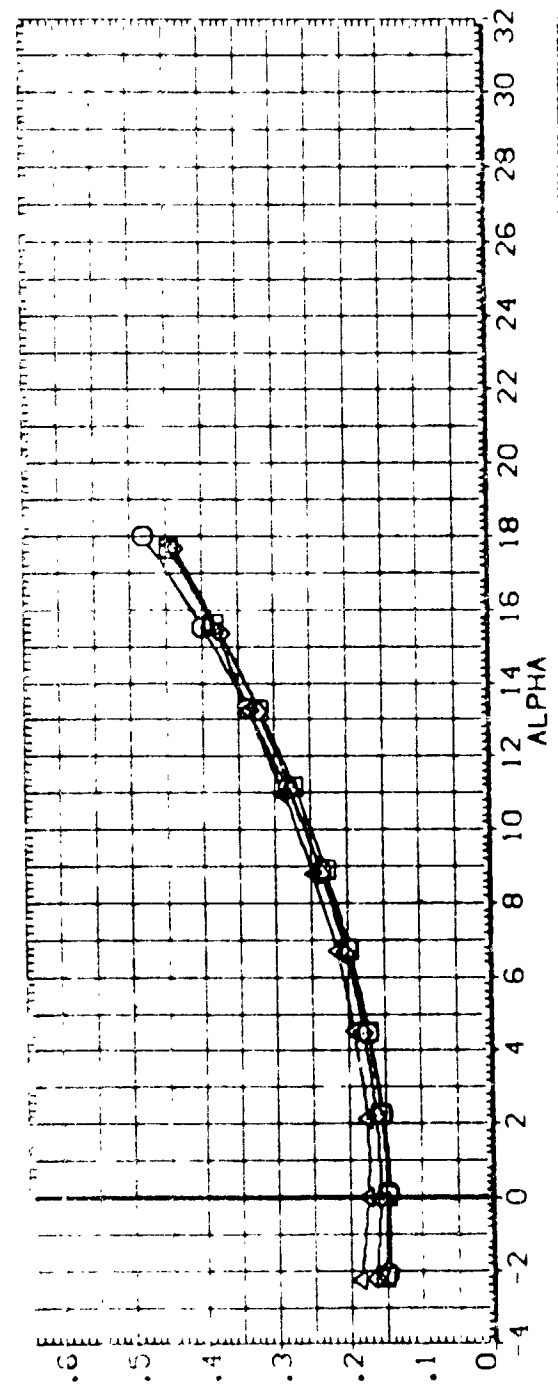


FIGURE 5. INBOARD ELEVON PITCH CHARACTERISTICS
(H)MACH = 1.08

DATA SET SIGNAL COUNTER DATA DESCRIPTION ELEV-RO ELEV-RI ELEV-LI ELEV-RO

1000000 1000000 1000000 1000000 1000000 1000000 1000000

1000000 1000000 1000000 1000000 1000000 1000000 1000000

1000000 1000000 1000000 1000000 1000000 1000000 1000000

1000000 1000000 1000000 1000000 1000000 1000000 1000000

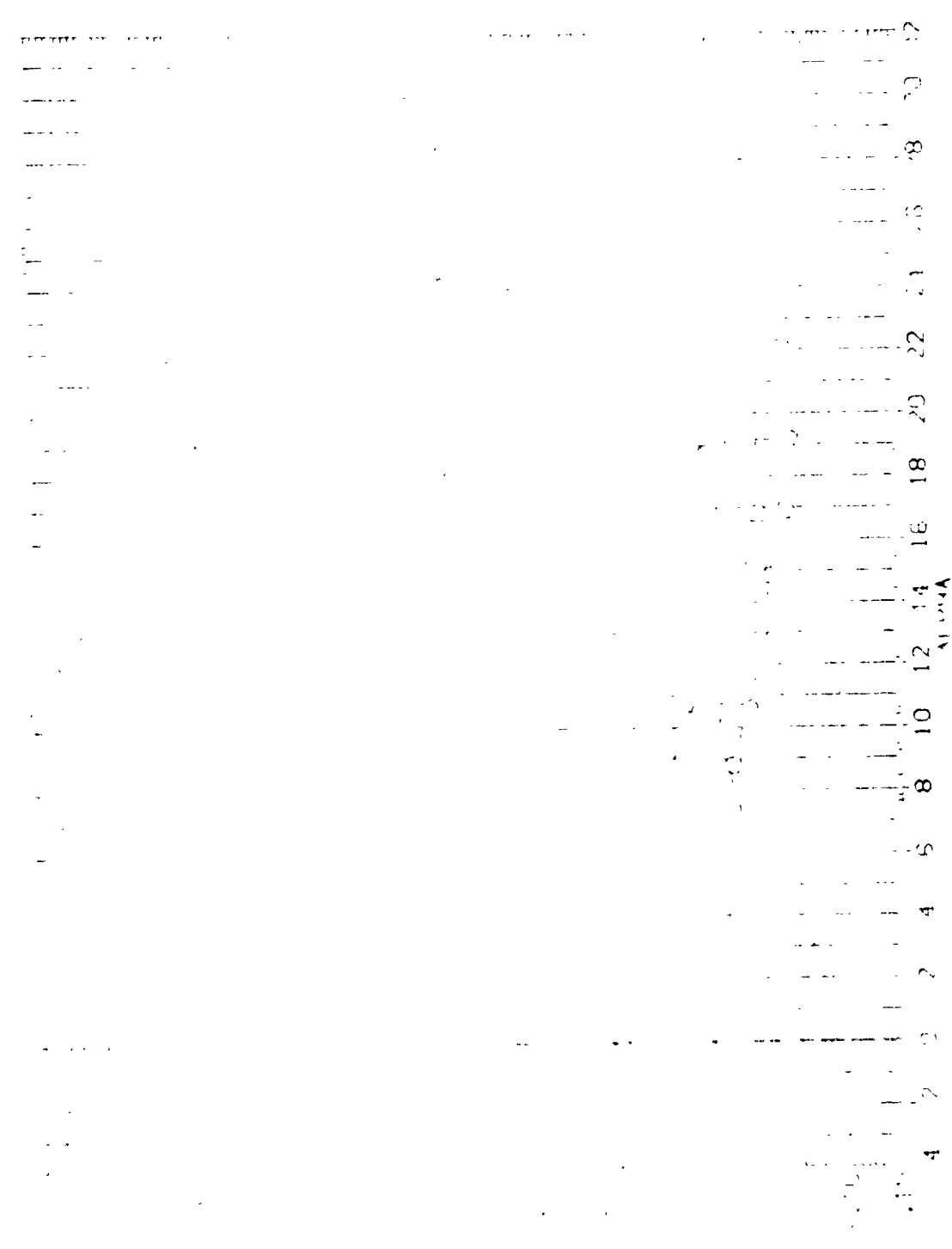


FIGURE 5. FORWARD ELEVON PITCH CHARACTERISTICS

CADWACH 1000000

1000000

DATA SET NAME: CONFIDENTIAL DESCRIPTION

NO. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

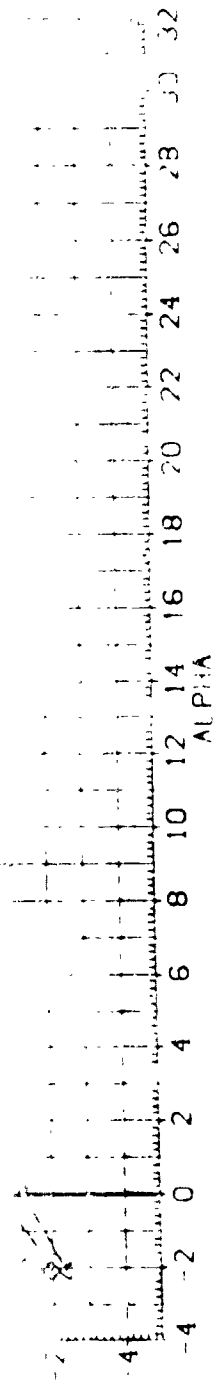


FIGURE 6. OUTBOARD FLUVON PITCH CHARACTERISTICS

(A)MACH = .60

DATA SET 1000 CONTROL ACTION DESCRIPTION
 (A) MACH 0.80
 (B) MACH 0.85
 (C) MACH 0.90
 (D) MACH 0.95
 (E) MACH 1.00
 (F) MACH 1.05
 (G) MACH 1.10
 (H) MACH 1.15
 (I) MACH 1.20
 (J) MACH 1.25
 (K) MACH 1.30
 (L) MACH 1.35
 (M) MACH 1.40
 (N) MACH 1.45
 (O) MACH 1.50
 (P) MACH 1.55
 (Q) MACH 1.60
 (R) MACH 1.65
 (S) MACH 1.70
 (T) MACH 1.75
 (U) MACH 1.80
 (V) MACH 1.85
 (W) MACH 1.90
 (X) MACH 1.95
 (Y) MACH 2.00
 (Z) MACH 2.05
 (AA) MACH 2.10
 (AB) MACH 2.15
 (AC) MACH 2.20
 (AD) MACH 2.25
 (AE) MACH 2.30
 (AF) MACH 2.35
 (AG) MACH 2.40
 (AH) MACH 2.45
 (AI) MACH 2.50
 (AJ) MACH 2.55
 (AK) MACH 2.60
 (AL) MACH 2.65
 (AM) MACH 2.70
 (AN) MACH 2.75
 (AO) MACH 2.80
 (AP) MACH 2.85
 (AQ) MACH 2.90
 (AR) MACH 2.95
 (AS) MACH 3.00
 (AT) MACH 3.05
 (AU) MACH 3.10
 (AV) MACH 3.15
 (AW) MACH 3.20
 (AX) MACH 3.25
 (AY) MACH 3.30
 (AZ) MACH 3.35
 (BA) MACH 3.40
 (BB) MACH 3.45
 (BC) MACH 3.50
 (BD) MACH 3.55
 (BE) MACH 3.60
 (BF) MACH 3.65
 (BG) MACH 3.70
 (BH) MACH 3.75
 (BI) MACH 3.80
 (BJ) MACH 3.85
 (BK) MACH 3.90
 (BL) MACH 3.95
 (BM) MACH 4.00
 (BN) MACH 4.05
 (BO) MACH 4.10
 (BP) MACH 4.15
 (BQ) MACH 4.20
 (BR) MACH 4.25
 (BS) MACH 4.30
 (BT) MACH 4.35
 (BU) MACH 4.40
 (BV) MACH 4.45
 (BW) MACH 4.50
 (BX) MACH 4.55
 (BY) MACH 4.60
 (BZ) MACH 4.65
 (CA) MACH 4.70
 (CB) MACH 4.75
 (CC) MACH 4.80
 (CD) MACH 4.85
 (CE) MACH 4.90
 (CF) MACH 4.95
 (CG) MACH 5.00
 (CH) MACH 5.05
 (CI) MACH 5.10
 (CJ) MACH 5.15
 (CK) MACH 5.20
 (CL) MACH 5.25
 (CM) MACH 5.30
 (CN) MACH 5.35
 (CO) MACH 5.40
 (CP) MACH 5.45
 (CQ) MACH 5.50
 (CR) MACH 5.55
 (CS) MACH 5.60
 (CT) MACH 5.65
 (CU) MACH 5.70
 (CV) MACH 5.75
 (CW) MACH 5.80
 (CX) MACH 5.85
 (CY) MACH 5.90
 (CZ) MACH 5.95
 (DA) MACH 6.00
 (DB) MACH 6.05
 (DC) MACH 6.10
 (DD) MACH 6.15
 (DE) MACH 6.20
 (DF) MACH 6.25
 (DG) MACH 6.30
 (DH) MACH 6.35
 (DI) MACH 6.40
 (DJ) MACH 6.45
 (DK) MACH 6.50
 (DL) MACH 6.55
 (DM) MACH 6.60
 (DN) MACH 6.65
 (DO) MACH 6.70
 (DP) MACH 6.75
 (DQ) MACH 6.80
 (DR) MACH 6.85
 (DS) MACH 6.90
 (DT) MACH 6.95
 (DU) MACH 7.00
 (DV) MACH 7.05
 (DW) MACH 7.10
 (DX) MACH 7.15
 (DY) MACH 7.20
 (DZ) MACH 7.25
 (EA) MACH 7.30
 (EB) MACH 7.35
 (EC) MACH 7.40
 (ED) MACH 7.45
 (EE) MACH 7.50
 (EF) MACH 7.55
 (EG) MACH 7.60
 (EH) MACH 7.65
 (EI) MACH 7.70
 (EJ) MACH 7.75
 (EK) MACH 7.80
 (EL) MACH 7.85
 (EM) MACH 7.90
 (EN) MACH 7.95
 (EO) MACH 8.00
 (EP) MACH 8.05
 (EQ) MACH 8.10
 (ER) MACH 8.15
 (ES) MACH 8.20
 (ET) MACH 8.25
 (EU) MACH 8.30
 (EV) MACH 8.35
 (EW) MACH 8.40
 (EX) MACH 8.45
 (EY) MACH 8.50
 (EZ) MACH 8.55
 (FA) MACH 8.60
 (FB) MACH 8.65
 (FC) MACH 8.70
 (FD) MACH 8.75
 (FE) MACH 8.80
 (FF) MACH 8.85
 (FG) MACH 8.90
 (FH) MACH 8.95
 (FI) MACH 9.00
 (FJ) MACH 9.05
 (FK) MACH 9.10
 (FL) MACH 9.15
 (FM) MACH 9.20
 (FN) MACH 9.25
 (FO) MACH 9.30
 (FP) MACH 9.35
 (FQ) MACH 9.40
 (FR) MACH 9.45
 (FS) MACH 9.50
 (FT) MACH 9.55
 (FU) MACH 9.60
 (FV) MACH 9.65
 (FW) MACH 9.70
 (FX) MACH 9.75
 (FY) MACH 9.80
 (FZ) MACH 9.85
 (GA) MACH 9.90
 (GB) MACH 9.95
 (GC) MACH 10.00
 (GD) MACH 10.05
 (GE) MACH 10.10
 (GF) MACH 10.15
 (GG) MACH 10.20
 (GH) MACH 10.25
 (GI) MACH 10.30
 (GJ) MACH 10.35
 (GK) MACH 10.40
 (GL) MACH 10.45
 (GM) MACH 10.50
 (GN) MACH 10.55
 (GO) MACH 10.60
 (GP) MACH 10.65
 (GQ) MACH 10.70
 (GR) MACH 10.75
 (GS) MACH 10.80
 (GT) MACH 10.85
 (GU) MACH 10.90
 (GV) MACH 10.95
 (GW) MACH 11.00
 (GX) MACH 11.05
 (GY) MACH 11.10
 (GZ) MACH 11.15
 (HA) MACH 11.20
 (HB) MACH 11.25
 (HC) MACH 11.30
 (HD) MACH 11.35
 (HE) MACH 11.40
 (HF) MACH 11.45
 (HG) MACH 11.50
 (HH) MACH 11.55
 (HI) MACH 11.60
 (HJ) MACH 11.65
 (HK) MACH 11.70
 (HL) MACH 11.75
 (HM) MACH 11.80
 (HN) MACH 11.85
 (HO) MACH 11.90
 (HP) MACH 11.95
 (HQ) MACH 12.00
 (HR) MACH 12.05
 (HS) MACH 12.10
 (HT) MACH 12.15
 (HU) MACH 12.20
 (HV) MACH 12.25
 (HW) MACH 12.30
 (HX) MACH 12.35
 (HY) MACH 12.40
 (HZ) MACH 12.45
 (IA) MACH 12.50
 (IB) MACH 12.55
 (IC) MACH 12.60
 (ID) MACH 12.65
 (IE) MACH 12.70
 (IF) MACH 12.75
 (IG) MACH 12.80
 (IH) MACH 12.85
 (II) MACH 12.90
 (IJ) MACH 12.95
 (IK) MACH 13.00
 (IL) MACH 13.05
 (IM) MACH 13.10
 (IN) MACH 13.15
 (IO) MACH 13.20
 (IP) MACH 13.25
 (IQ) MACH 13.30
 (IR) MACH 13.35
 (IS) MACH 13.40
 (IT) MACH 13.45
 (IU) MACH 13.50
 (IV) MACH 13.55
 (IW) MACH 13.60
 (IX) MACH 13.65
 (IY) MACH 13.70
 (IZ) MACH 13.75
 (JA) MACH 13.80
 (JB) MACH 13.85
 (JC) MACH 13.90
 (JD) MACH 13.95
 (JE) MACH 14.00
 (JF) MACH 14.05
 (JG) MACH 14.10
 (JH) MACH 14.15
 (JI) MACH 14.20
 (JJ) MACH 14.25
 (JK) MACH 14.30
 (JL) MACH 14.35
 (JM) MACH 14.40
 (JN) MACH 14.45
 (JO) MACH 14.50
 (JP) MACH 14.55
 (JQ) MACH 14.60
 (JR) MACH 14.65
 (JS) MACH 14.70
 (JT) MACH 14.75
 (JU) MACH 14.80
 (JV) MACH 14.85
 (JW) MACH 14.90
 (JX) MACH 14.95
 (JY) MACH 15.00
 (JZ) MACH 15.05
 (KA) MACH 15.10
 (KB) MACH 15.15
 (KC) MACH 15.20
 (KD) MACH 15.25
 (KE) MACH 15.30
 (KF) MACH 15.35
 (KG) MACH 15.40
 (KH) MACH 15.45
 (KI) MACH 15.50
 (KL) MACH 15.55
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 (KN) MACH 15.65
 (KO) MACH 15.70
 (KP) MACH 15.75
 (KQ) MACH 15.80
 (KR) MACH 15.85
 (KS) MACH 15.90
 (KT) MACH 15.95
 (KU) MACH 16.00
 (KV) MACH 16.05
 (KW) MACH 16.10
 (KX) MACH 16.15
 (KY) MACH 16.20
 (KZ) MACH 16.25
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 (LB) MACH 16.35
 (LC) MACH 16.40
 (LD) MACH 16.45
 (LE) MACH 16.50
 (LF) MACH 16.55
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 (LH) MACH 16.65
 (LI) MACH 16.70
 (LJ) MACH 16.75
 (LK) MACH 16.80
 (LL) MACH 16.85
 (LM) MACH 16.90
 (LN) MACH 16.95
 (LO) MACH 17.00
 (LP) MACH 17.05
 (LQ) MACH 17.10
 (LR) MACH 17.15
 (LS) MACH 17.20
 (LT) MACH 17.25
 (LU) MACH 17.30
 (LV) MACH 17.35
 (LW) MACH 17.40
 (LX) MACH 17.45
 (LY) MACH 17.50
 (LZ) MACH 17.55
 (MA) MACH 17.60
 (MB) MACH 17.65
 (MC) MACH 17.70
 (MD) MACH 17.75
 (ME) MACH 17.80
 (MF) MACH 17.85
 (MG) MACH 17.90
 (MH) MACH 17.95
 (MI) MACH 18.00
 (MJ) MACH 18.05
 (MK) MACH 18.10
 (ML) MACH 18.15
 (MM) MACH 18.20
 (MN) MACH 18.25
 (MO) MACH 18.30
 (MP) MACH 18.35
 (MQ) MACH 18.40
 (MR) MACH 18.45
 (MS) MACH 18.50
 (MT) MACH 18.55
 (MU) MACH 18.60
 (MV) MACH 18.65
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 (NV) MACH 19.95
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 (NY) MACH 20.10
 (NZ) MACH 20.15
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 (OB) MACH 20.25
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 (OD) MACH 20.35
 (OE) MACH 20.40
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 (OG) MACH 20.50
 (OH) MACH 20.55
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 (OJ) MACH 20.65
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 (OL) MACH 20.75
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 (ON) MACH 20.85
 (OO) MACH 20.90
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 (OS) MACH 21.10
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 (PU) MACH 22.50
 (PV) MACH 22.55
 (PW) MACH 22.60
 (PX) MACH 22.65
 (PY) MACH 22.70
 (PZ) MACH 22.75
 (QA) MACH 22.80
 (QB) MACH 22.85
 (QC) MACH 22.90
 (QD) MACH 22.95
 (QE) MACH 23.00
 (QF) MACH 23.05
 (QG) MACH 23.10
 (QH) MACH 23.15
 (QI) MACH 23.20
 (QJ) MACH 23.25
 (QK) MACH 23.30
 (QL) MACH 23.35
 (QM) MACH 23.40
 (QN) MACH 23.45
 (QO) MACH 23.50
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 (QV) MACH 23.85
 (QW) MACH 23.90
 (QX) MACH 23.95
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 (QZ) MACH 24.05
 (RA) MACH 24.10
 (RB) MACH 24.15
 (RC) MACH 24.20
 (RD) MACH 24.25
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 (RH) MACH 24.45
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 (RK) MACH 24.60
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 (RN) MACH 24.75
 (RO) MACH 24.80
 (RP) MACH 24.85
 (RQ) MACH 24.90
 (RR) MACH 24.95
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 (RT) MACH 25.05
 (RU) MACH 25.10
 (RV) MACH 25.15
 (RW) MACH 25.20
 (RX) MACH 25.25
 (RY) MACH 25.30
 (RZ) MACH 25.35
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 (SB) MACH 25.45
 (SC) MACH 25.50
 (SD) MACH 25.55
 (SE) MACH 25.60
 (SF) MACH 25.65
 (SG) MACH 25.70
 (SH) MACH 25.75
 (SI) MACH 25.80
 (SJ) MACH 25.85
 (SK) MACH 25.90
 (SL) MACH 25.95
 (SM) MACH 26.00
 (SN) MACH 26.05
 (SO) MACH 26.10
 (SP) MACH 26.15
 (SQ) MACH 26.20
 (SR) MACH 26.25
 (SS) MACH 26.30
 (ST) MACH 26.35
 (SU) MACH 26.40
 (SV) MACH 26.45
 (SW) MACH 26.50
 (SX) MACH 26.55
 (SY) MACH 26.60
 (SZ) MACH 26.65
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 (TB) MACH 26.75
 (TC) MACH 26.80
 (TD) MACH 26.85
 (TE) MACH 26.90
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 (TH) MACH 27.05
 (TI) MACH 27.10
 (TJ) MACH 27.15
 (TK) MACH 27.20
 (TL) MACH 27.25
 (TM) MACH 27.30
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 (TW) MACH 27.80
 (TX) MACH 27.85
 (TY) MACH 27.90
 (TZ) MACH 27.95
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 (UB) MACH 28.05
 (UC) MACH 28.10
 (UD) MACH 28.15
 (UE) MACH 28.20
 (UF) MACH 28.25
 (UG) MACH 28.30
 (UH) MACH 28.35
 (UI) MACH 28.40
 (UJ) MACH 28.45
 (UK) MACH 28.50
 (UL) MACH 28.55
 (UM) MACH 28.60
 (UN) MACH 28.65
 (UO) MACH 28.70
 (UP) MACH 28.75
 (UQ) MACH 28.80
 (UR) MACH 28.85
 (US) MACH 28.90
 (UT) MACH 28.95
 (UU) MACH 29.00
 (UV) MACH 29.05
 (UW) MACH 29.10
 (UX) MACH 29.15
 (UY) MACH 29.20
 (UZ) MACH 29.25
 (VA) MACH 29.30
 (VB) MACH 29.35
 (VC) MACH 29.40
 (VD) MACH 29.45
 (VE) MACH 29.50
 (VF) MACH 29.55
 (VG) MACH 29.60
 (VH) MACH 29.65
 (VI) MACH 29.70
 (VJ) MACH 29.75
 (VK) MACH 29.80
 (VL) MACH 29.85
 (VM) MACH 29.90
 (VN) MACH 29.95
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 (VP) MACH 30.05
 (VQ) MACH 30.10
 (VR) MACH 30.15
 (VS) MACH 30.20
 (VT) MACH 30.25
 (VU) MACH 30.30
 (VV) MACH 30.35
 (VW) MACH 30.40
 (VX) MACH 30.45
 (VY) MACH 30.50
 (VZ) MACH 30.55
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 (WB) MACH 30.65
 (WC) MACH 30.70
 (WD) MACH 30.75
 (WE) MACH 30.80
 (WF) MACH 30.85
 (WG) MACH 30.90
 (WH) MACH 30.95
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 (WJ) MACH 31.05
 (WK) MACH 31.10
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 (WP) MACH 31.35
 (WQ) MACH 31.40
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 (WX) MACH 31.75
 (WY) MACH 31.80
 (WZ) MACH 31.85
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 (XC) MACH 32.00
 (XD) MACH 32.05
 (XE) MACH 32.10
 (XF) MACH 32.15
 (XG) MACH 32.20
 (XH) MACH 32.25
 (XI) MACH 32.30
 (XJ) MACH 32.35
 (XK) MACH 32.40
 (XL) MACH 32.45
 (XM) MACH 32.50
 (XN) MACH 32.55
 (XO) MACH 32.60
 (XP) MACH 32.65
 (XQ) MACH 32.70
 (XR) MACH 32.75
 (XS) MACH 32.80
 (XT) MACH 32.85
 (XU) MACH 32.90
 (XV) MACH 32.95
 (XW) MACH 33.00
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 (XY) MACH 33.10
 (XZ) MACH 33.15
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 (YC) MACH 33.30
 (YD) MACH 33.35
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 (YG) MACH 33.50
 (YH) MACH 33.55
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 (YJ) MACH 33.65
 (YK) MACH 33.70
 (YL) MACH 33.75
 (YM) MACH 33.80
 (YN) MACH 33.85
 (YO) MACH 33.90
 (YP) MACH 33.95
 (YQ) MACH 34.00
 (YR) MACH 34.05
 (YS) MACH 34.10
 (YT) MACH 34.15
 (YU) MACH 34.20
 (YV) MACH 34.25
 (YW) MACH 34.30
 (YX) MACH 34.35
 (YY) MACH 34.40
 (YZ) MACH 34.45
 (ZA) MACH 34.50
 (ZB) MACH 34.55
 (ZC) MACH 34.60
 (ZD) MACH 34.65
 (ZE) MACH 34.70
 (ZF) MACH 34.75
 (ZG) MACH 34.80
 (ZH) MACH 34.85
 (ZI) MACH 34.90
 (ZJ) MACH 34.95
 (ZK) MACH 35.00
 (ZL) MACH 35.05
 (ZM) MACH 35.10
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 (ZO) MACH 35.20
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 (ZQ) MACH 35.30
 (ZR) MACH 35.35
 (ZS) MACH 35.40
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 (ZW) MACH 35.60
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 (AC) MACH 35.90
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 (AJ) MACH 36.25
 (AK) MACH 36.30
 (AL) MACH 36.35
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 (AS) MACH 36.70
 (AT) MACH 36.75
 (AU) MACH 36.80
 (AV) MACH 36.85
 (AW) MACH 36.90
 (AX) MACH 36.95
 (AY) MACH 37.00
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 (BK) MACH 37.60
 (BL) MACH 37.65
 (BM) MACH 37.70
 (BN) MACH 37.75
 (BO) MACH 37.80
 (BP) MACH 37.85
 (BQ) MACH 37.90
 (BR) MACH 37.95
 (BS) MACH 38.00
 (BT) MACH 38.05
 (BU) MACH 38.10
 (BV) MACH 38.15
 (BW) MACH 38.20
 (BX) MACH 38.25
 (BY) MACH 38.30
 (BZ) MACH 38.35
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 (CB) MACH 38.45
 (CC) MACH 38.50
 (CD) MACH 38.55
 (CE) MACH 38.60
 (CF) MACH 38.65
 (CG) MACH 38.70
 (CH) MACH 38.75
 (CI) MACH 38.80
 (CJ) MACH 38.85
 (CK) MACH 38.90
 (CL) MACH 38.95
 (CM) MACH 39.00
 (CN) MACH 39.05
 (CO) MACH 39.10
 (CP) MACH 39.15
 (CQ) MACH 39.20
 (CR) MACH 39.25
 (CS) MACH 39.30
 (CT) MACH 39.35
 (CU) MACH 39.40
 (CV) MACH 39.45
 (CW) MACH 39.50
 (CX) MACH 39.55
 (CY) MACH 39.60
 (CZ) MACH 39.65
 (DA) MACH 39.70
 (DB) MACH 39.75
 (DC) MACH 39.80
 (DD) MACH 39.85
 (DE) MACH 39.90
 (DF) MACH 39.95
 (DG) MACH 40.00
 (DH) MACH 40.05
 (DI) MACH 40.10
 (DJ) MACH 40.15
 (DK) MACH 40.20
 (DL) MACH 40.25
 (DM) MACH 40.30
 (DN) MACH 40.35
 (DO) MACH 40.40
 (DP) MACH 40.45
 (DQ) MACH 40.50
 (DR) MACH 40.55
 (DS) MACH 40.60
 (DT) MACH 40.65
 (DU) MACH 40.70
 (DV) MACH 40.75
 (DW) MACH 40.80
 (DX) MACH 40.85
 (DY) MACH 40.90
 (DZ) MACH 40.95
 (EA) MACH 41.00
 (EB) MACH 41.05
 (EC) MACH 41.10
 (ED) MACH 41.15
 (EE) MACH 41.20
 (EF) MACH 41.25
 (EG) MACH 41.30
 (EH) MACH 41.35
 (EI) MACH 41.40
 (EJ) MACH 41.45
 (EK) MACH 41.50
 (EL) MACH 41.55
 (EM) MACH 41.60
 (EN) MACH 41.65
 (EO) MACH 41.70
 (EP) MACH 41.75
 (EQ) MACH 41.80
 (ER) MACH 41.85
 (ES) MACH 41.90
 (ET) MACH 41.95
 (EU) MACH 42.00
 (EV) MACH 42.05
 (EW) MACH 42.10

DATA SET SYMBOL CONFIGURATION FOR SOURCE POSITION

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

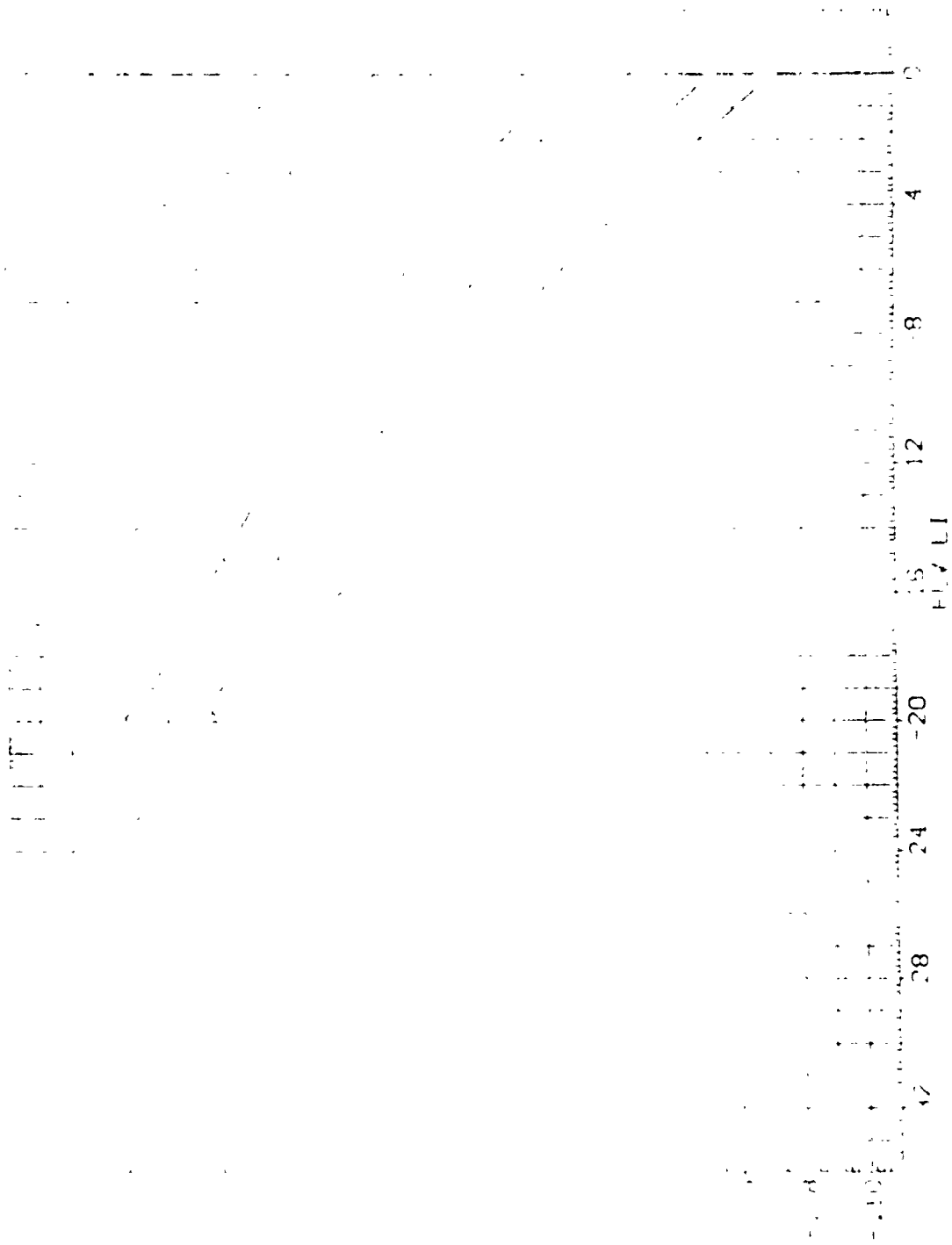


FIGURE 7. FIM SPAN FIFVN PITCH CONTROL EFFECTIVENESS
(B, MACH = .80)

DATA SET SYMBOL USER IDENTIFICATION ALPHA

001001	001001	0.000
001002	001002	0.000
001003	001003	0.000
001004	001004	0.000
001005	001005	0.000
001006	001006	0.000
001007	001007	0.000
001008	001008	0.000
001009	001009	0.000
001010	001010	0.000
001011	001011	0.000
001012	001012	0.000
001013	001013	0.000
001014	001014	0.000
001015	001015	0.000
001016	001016	0.000
001017	001017	0.000
001018	001018	0.000
001019	001019	0.000
001020	001020	0.000
001021	001021	0.000
001022	001022	0.000
001023	001023	0.000
001024	001024	0.000
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001026	001026	0.000
001027	001027	0.000
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001029	001029	0.000
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001034	001034	0.000
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001038	001038	0.000
001039	001039	0.000
001040	001040	0.000
001041	001041	0.000
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001043	001043	0.000
001044	001044	0.000
001045	001045	0.000
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001091	001091	0.000
001092	001092	0.000
001093	001093	0.000
001094	001094	0.000
001095	001095	0.000
001096	001096	0.000
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001098	001098	0.000
001099	001099	0.000
001100	001100	0.000

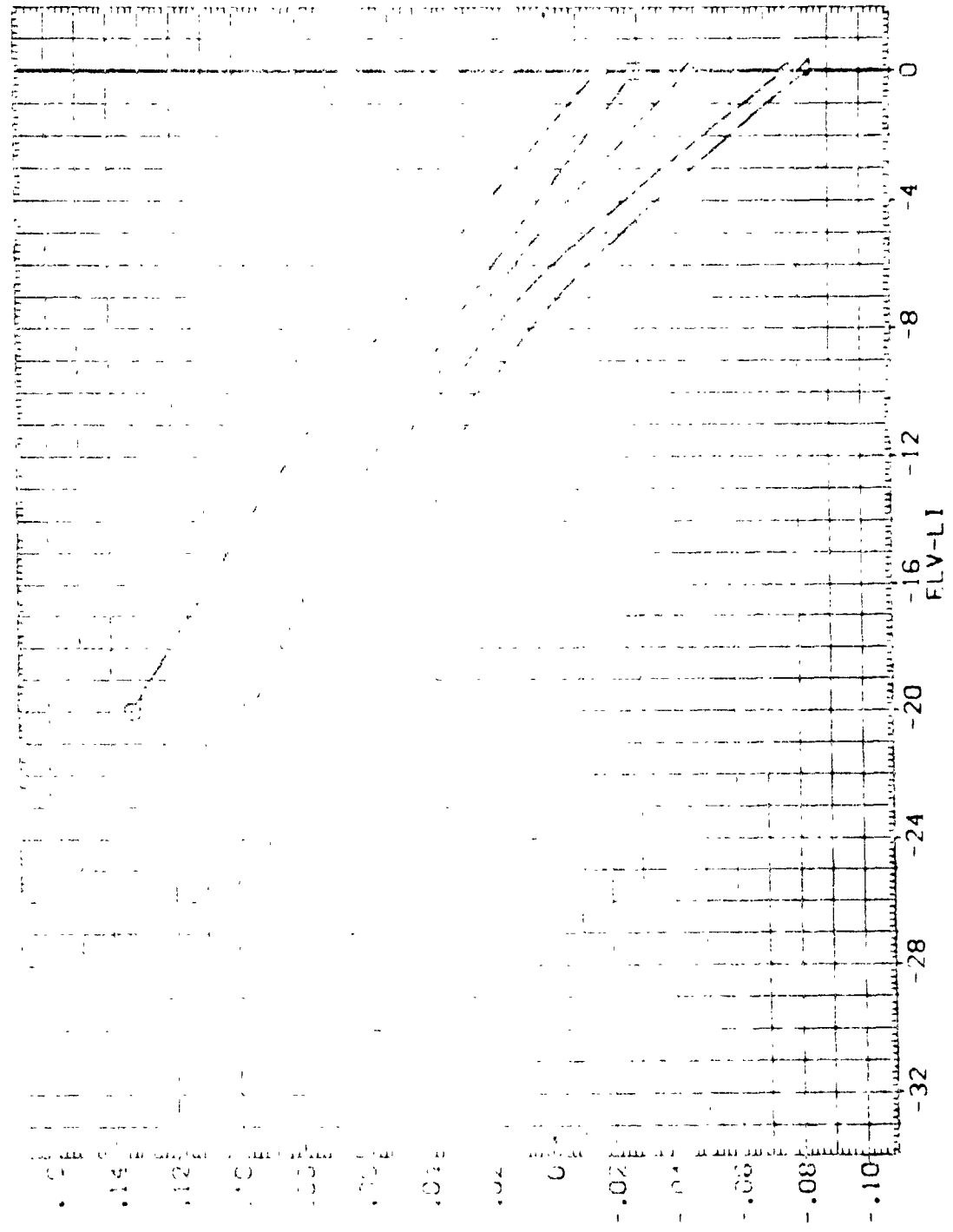


FIGURE 7. FULL SPAN ELEVON PITCH CONTROL EFFECTIVENESS

(COMACH) = .05

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION
A-18 8-F	PI	HQ HI C900A
A-16 9-F	HI	SDO QI D900A
B-17 8-F	PI	HQ HI C900A
B-16 9-F	HI	SDO QI D900A

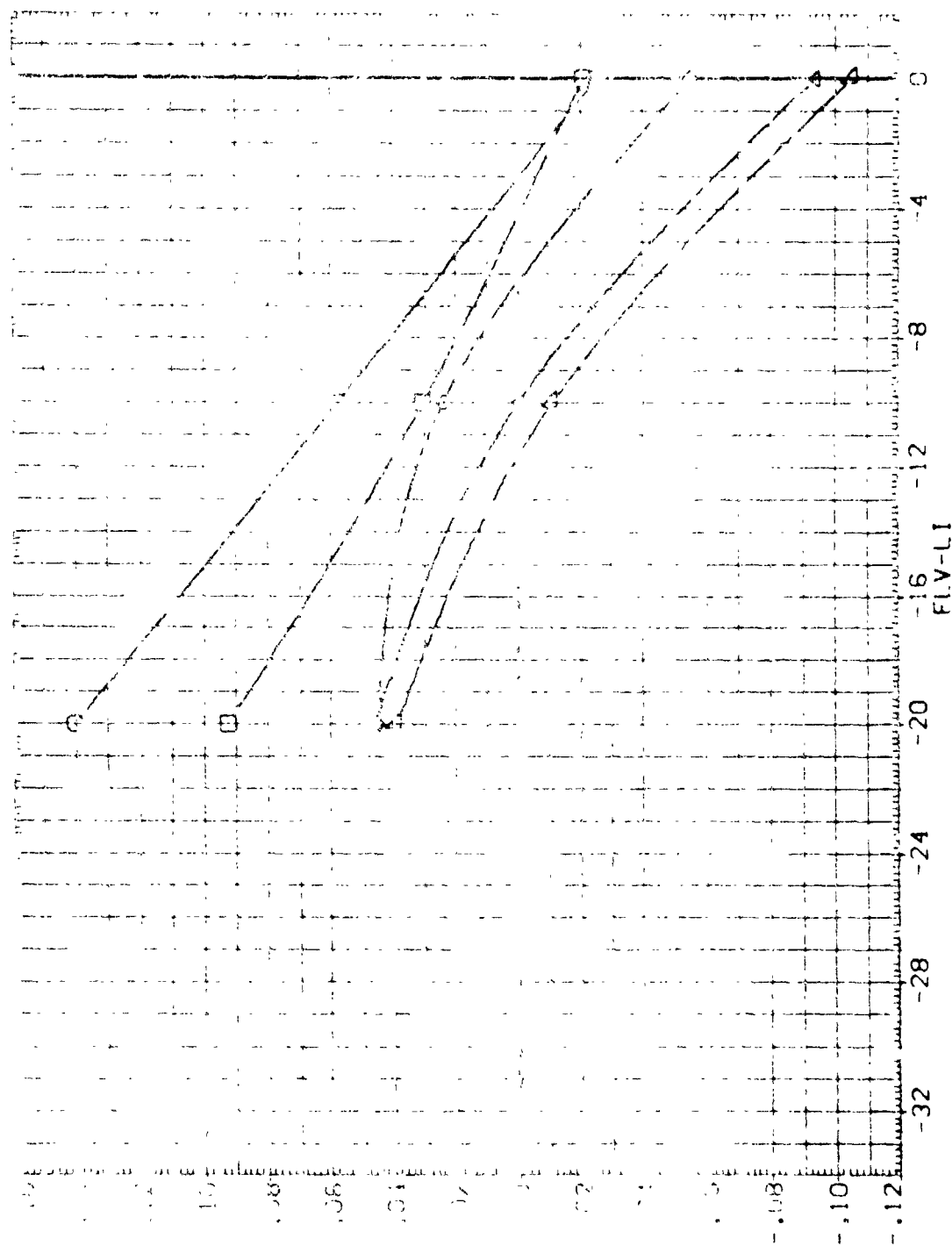


FIGURE 7. FULL SPAN ELEVEN PITCH CONTROL EFFECTIVENESS

$$(D)MACH = .30$$

35

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA
(B1)F01	LA-48 8-FT TPT 580 R1-0000	0.00
(B1)F02	LA-48 8-FT TPT 580 R1-0000	5.000
(B1)F03	LA-48 8-FT TPT 580 R1-0000	10.000
(B1)F04	LA-48 8-FT TPT 580 R1-0000	15.000
(B1)F05	LA-48 8-FT TPT 580 R1-0000	18.000

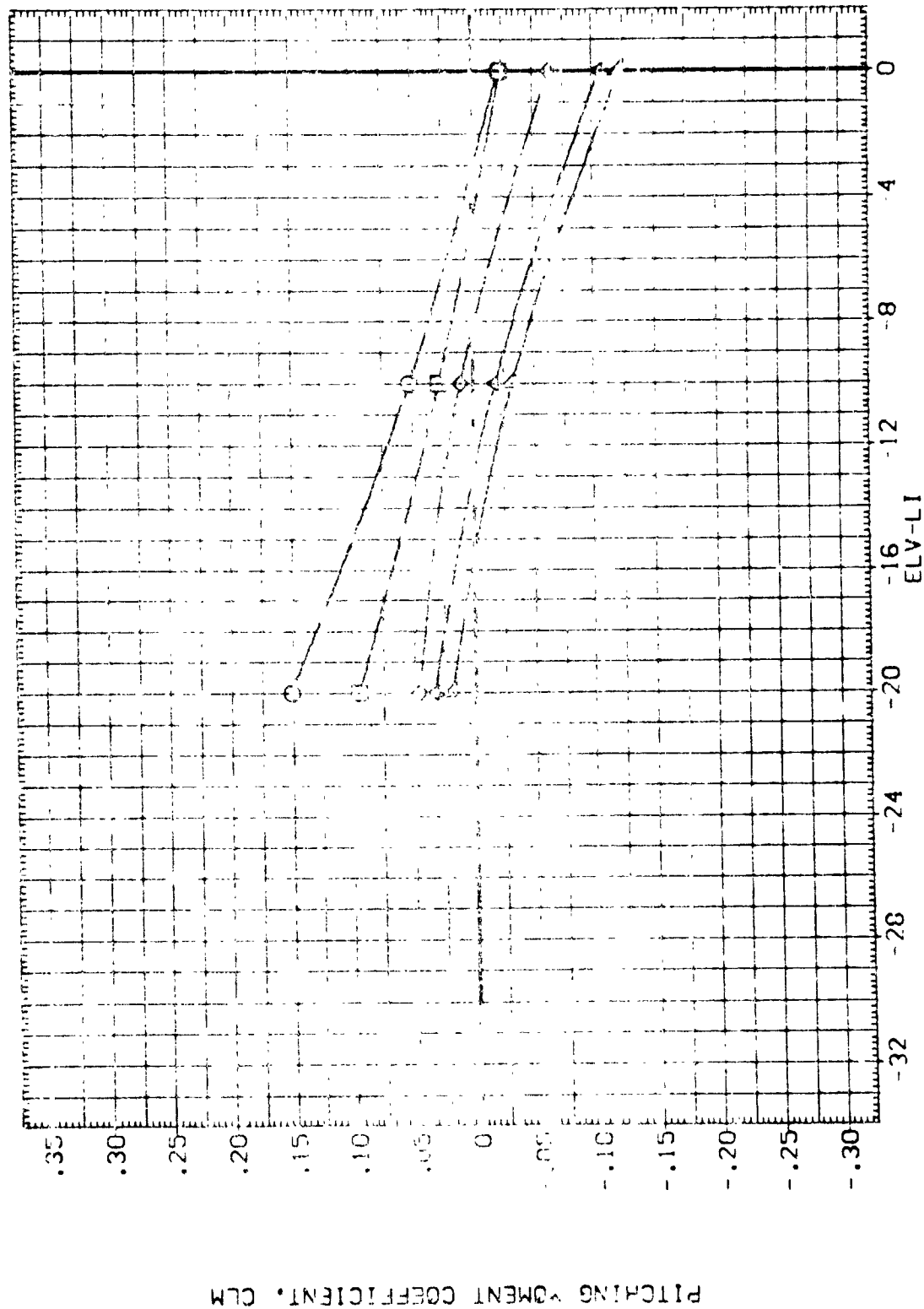


FIGURE 7. FULL SPAN ELEVON PITCH CONTROL EFFECTIVENESS

(E)MACH = .92

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA

(B-1501)	A-48 8 FT IPT 090 RI-0898/139 098 SPL IT ELEVON	0.00
(B-1502)	A-48 8 FT IPT 090 RI-0898/139 098 SPL IT ELEVON	5.000
(B-1503)	A-48 8 FT IPT 090 RI-0898/139 098 SPL IT ELEVON	10.000
(B-1504)	A-48 8 FT IPT 090 RI-0898/139 098 SPL IT ELEVON	15.000
(B-1505)	A-48 8 FT IPT 090 RI-0898/139 098 SPL IT ELEVON	18.000

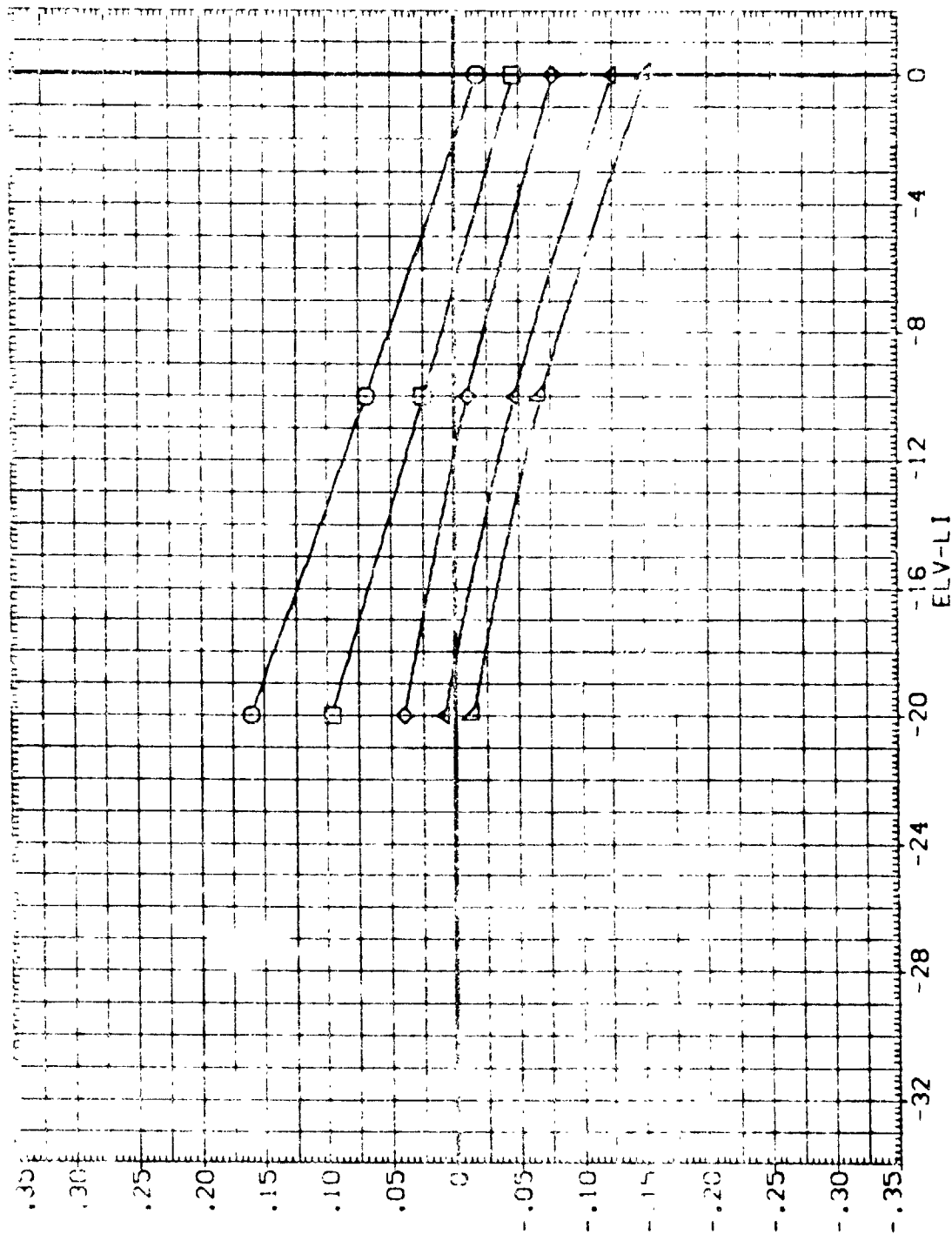
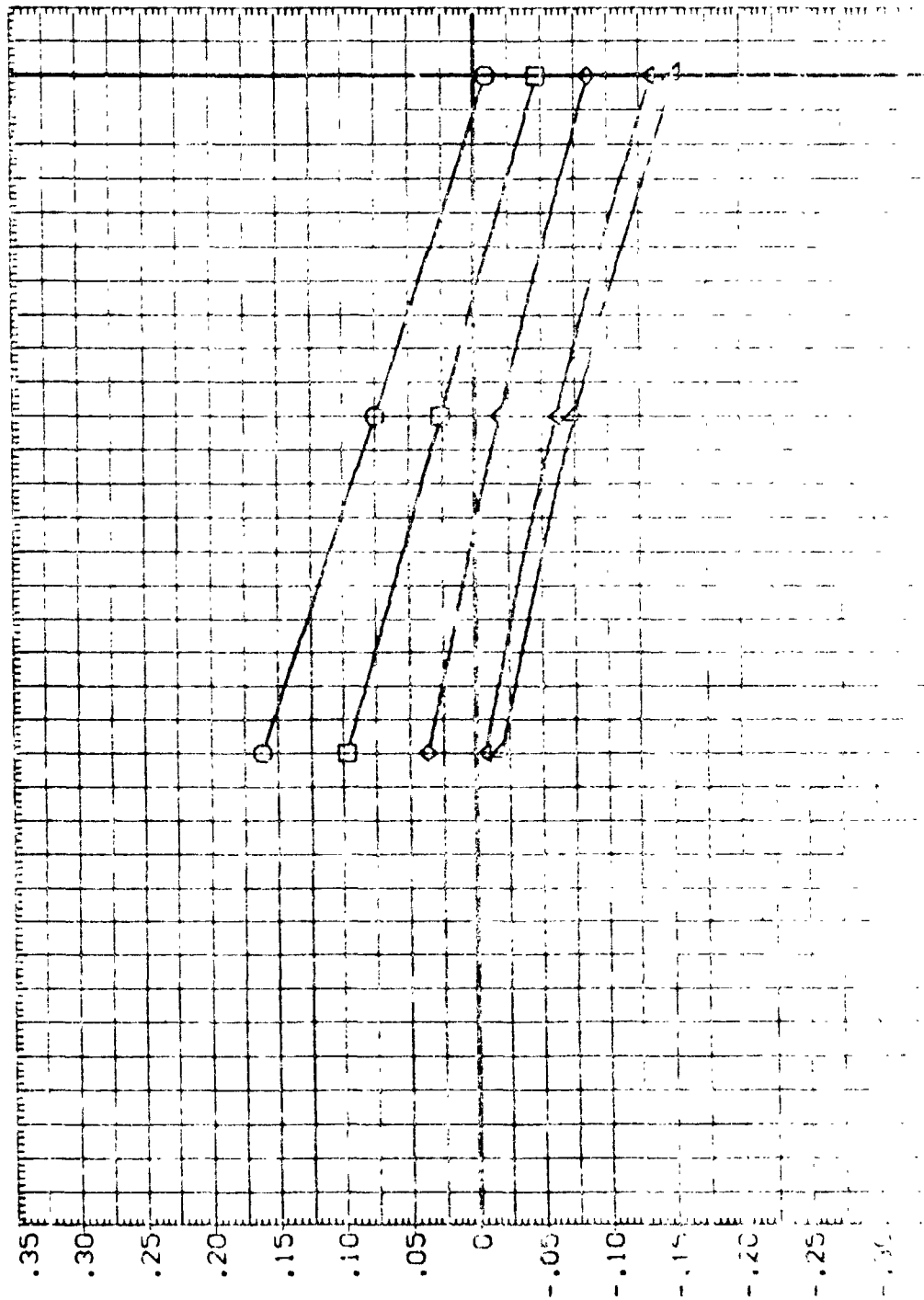


FIGURE 7. FINAL SPAN ELEVON PITCH CONTROL EFFECTIVENESS

(F)MACH = .95

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION	ALPHA
(B-1F01)	LA-18 3-1 101	500 RI-0893/ 35 CUB SPLIT ELEVON	0.00
(B-1F02)	LA-18 3-1 101	500 RI-0893/ 35 CUB SPLIT ELEVON	5.00
(B-1F03)	LA-48 8-1 101	500 RI-0893/ 35 CUB SPLIT ELEVON	10.00
(B-1F04)	LA-48 8-1 101	500 RI-0893/ 35 CUB SPLIT ELEVON	15.00
(B-1F05)	LA-48 8-1 101	500 RI-0893/ 35 CUB SPLIT ELEVON	19.00



PITCHING MOMENT COEFFICIENT, CLM

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA

(B1F01)	LA-48 8-FT TPT 600 RI-0898/39	0.00
(B1F02)	LA-48 8-FT TPT 600 RI-0898/39	5.000
(B1F03)	LA-48 8-FT TPT 600 RI-0898/39	10.000
(B1F04)	LA-48 8-FT TPT 600 RI-0898/39	15.000
(B1F05)	LA-48 8-FT TPT 600 RI-0898/39	18.000

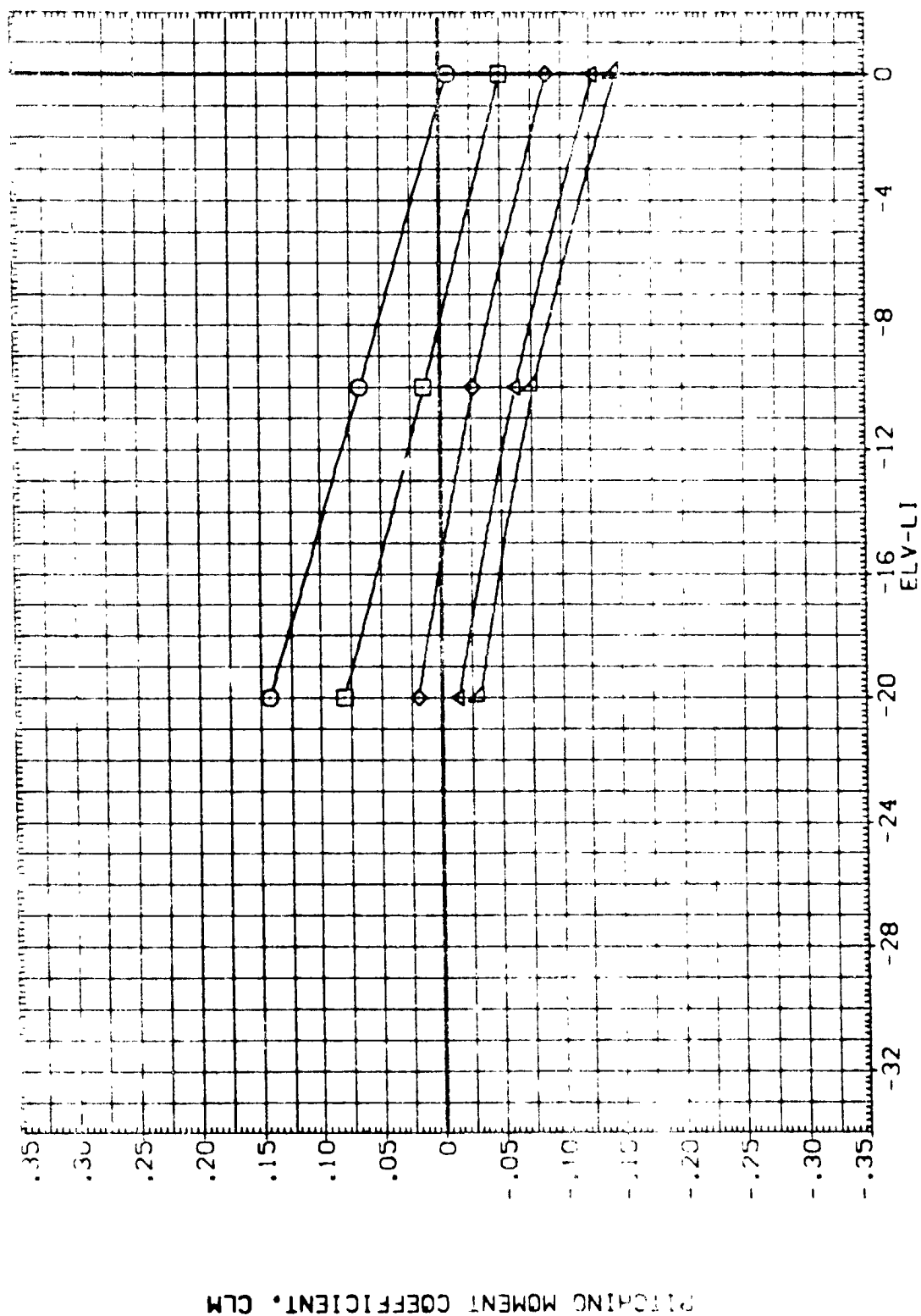


FIGURE 7. FULL SPAN ELEVON PITCH CONTROL EFFECTIVENESS

(H)MACH = 1.08

FIGURE 7. FULL SPAN ELEVEN PITCH CONTROL EFFECTIVENESS

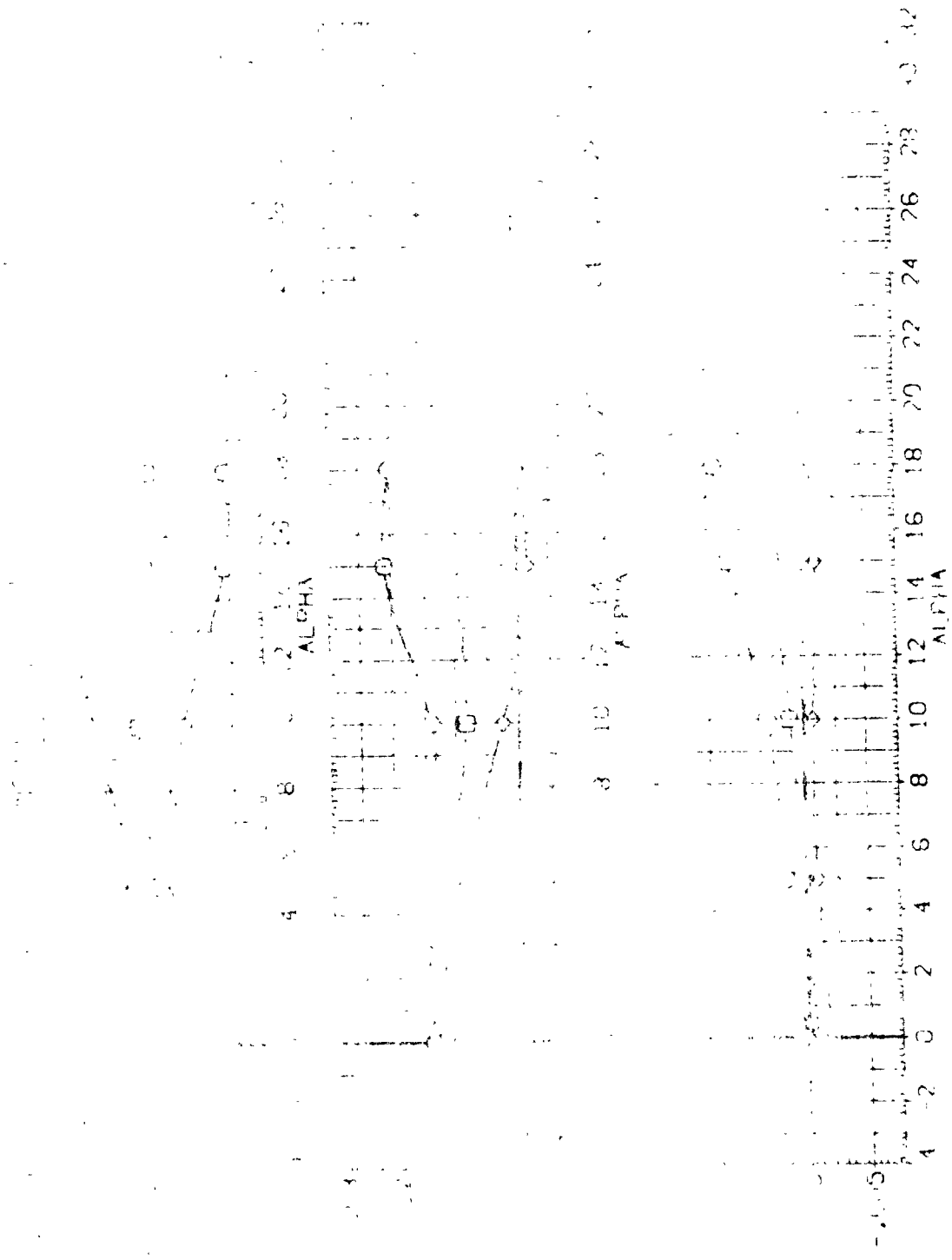


FIGURE 7. FULL SPAN ELEVEN PITCH CONTROL EFFECTIVENESS

(B)MACH = .80

DATA SET SYMBOL: CONFIGURATION DESCRIPTION: 0000 SPLIT ELEVON
 (2-1001) 1-18 0 FT PT SEC 0-1898/35 000 SPLIT ELEVON
 (2-1002) 1-19 0 FT PT SEC 0-1898/35 000 SPLIT ELEVON
 (2-1003) 1-20 0 FT PT SEC 0-1898/35 000 SPLIT ELEVON
 (2-1004) 1-21 0 FT PT SEC 0-1898/35 000 SPLIT ELEVON
 (2-1005) 1-22 0 FT PT SEC 0-1898/35 000 SPLIT ELEVON
 (2-1006) 1-23 0 FT PT SEC 0-1898/35 000 SPLIT ELEVON

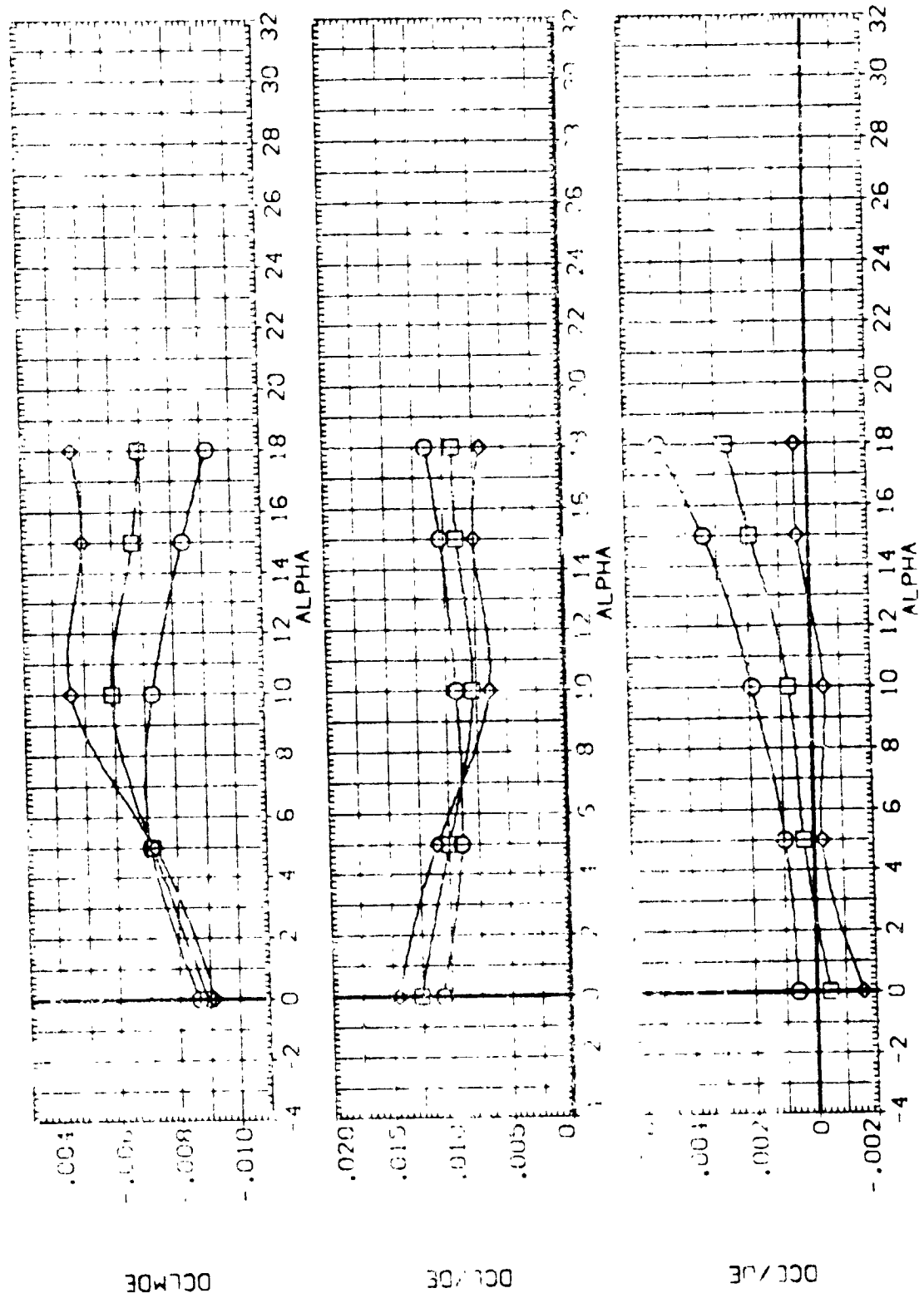
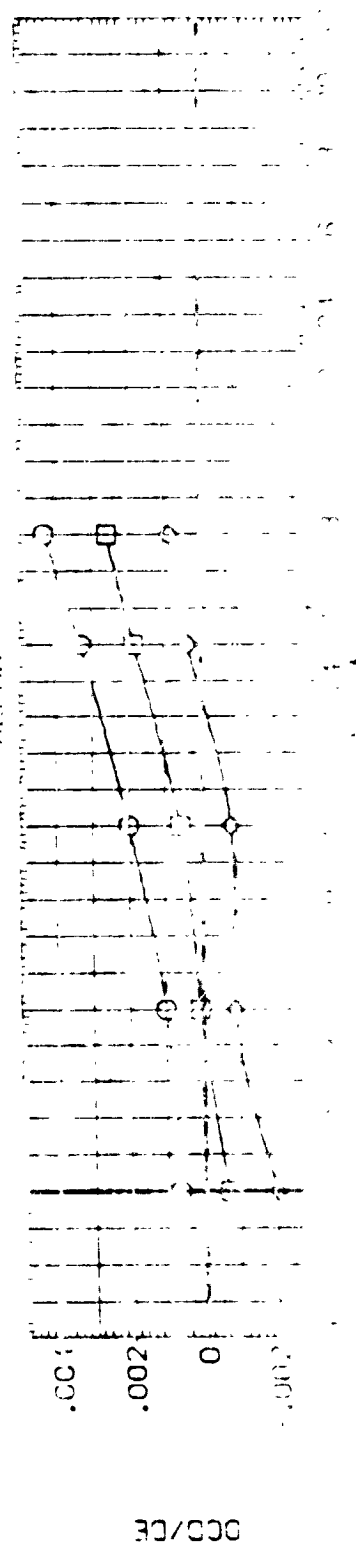
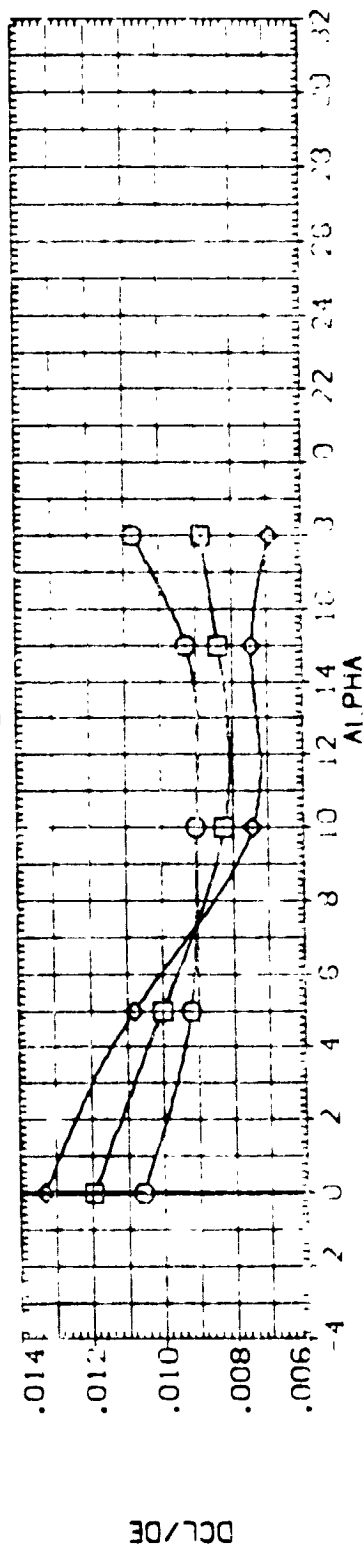
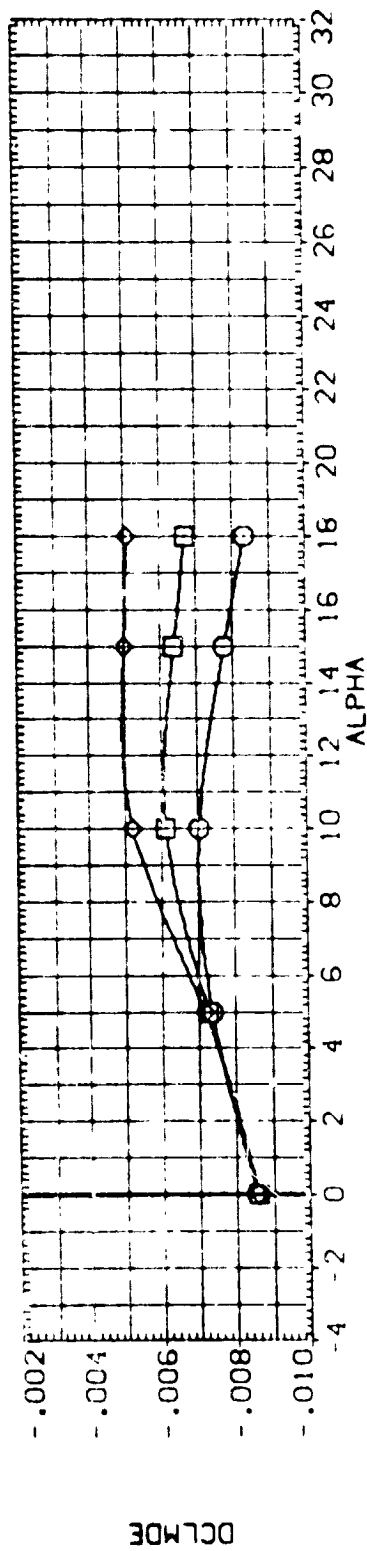


FIGURE 7. FULL SPAN ELEVON PITCH CONTROL EFFECTIVENESS

(F)MACH = .95

DATA SET SYMBOL CONFIGURATION DESCRIPTION

LA-48	8-41	1PT	680	R1-0898/139	0-48	SP-11	ELEVON	ELV-L0	ELV-L1	ELV-R1	ELV-R0
(C-1001)	LA-48	8-41	1PT	680	R1-0898/139	0-48	SP-11	ELEVON	.000	.000	.000
(C-1005)	LA-48	8-41	1PT	680	R1-0898/139	0-48	SP-11	ELEVON	-10.000	-10.000	-10.000
	LA-48	8-41	1PT	680	R1-0898/139	0-48	SP-11	ELEVON	-20.000	-20.000	-20.000



DATA SET SYMBOL: CONFIGURATION DESCRIPTION: DATA SET SYMBOL: CONFIGURATION DESCRIPTION:

(CH1001) LA-48 8-FT IPT 680 RI-03593/39 098 SPL IT ELEVON (CH1002) LA-48 8-FT IPT 680 RI-03593/39 098 SPL IT ELEVON (CH1003) LA-48 8-FT IPT 680 RI-03593/39 098 SPL IT ELEVON (CH1004) LA-48 8-FT IPT 680 RI-03593/39 098 SPL IT ELEVON

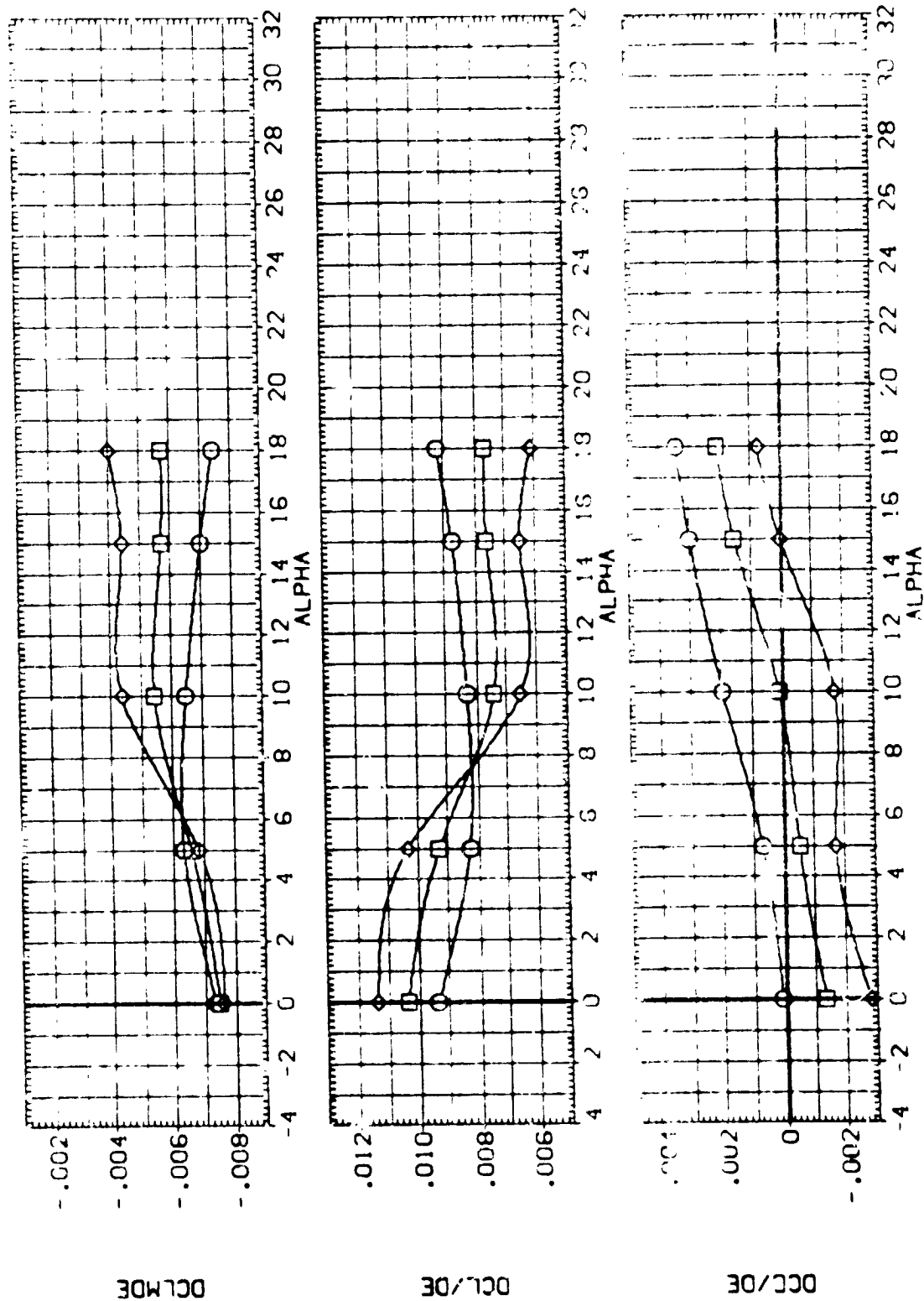


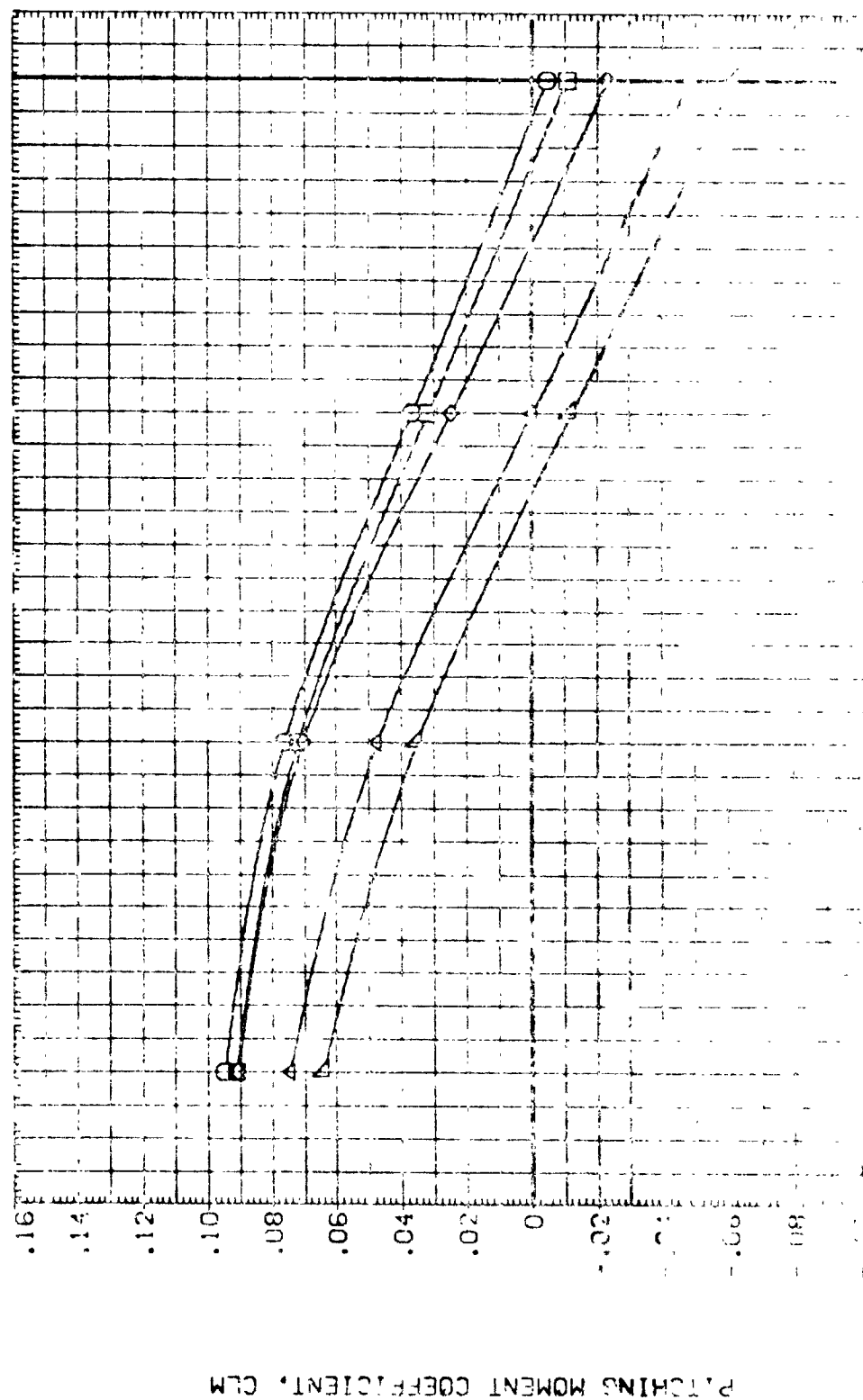
FIGURE 7. FULL SPAN ELEVON PITCH CONTROL EFFECTIVENESS

(M)MACH = 1.08

Page 3

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION	ALPHA
08-101	LA-13	8-FT IPT 580 R1-0893/38	0.000
08-102	LA-13	8-FT IPT 580 R1-0893/38	5.000
08-103	LA-13	8-FT IPT 580 R1-0893/38	10.000
08-104	LA-13	8-FT IPT 580 R1-0893/38	15.000
08-105	LA-13	8-FT IPT 580 R1-0893/38	18.000



DATA SET	DATE	TIME	LOCATION
01	1980	10:00	1000
02	1980	10:00	1000
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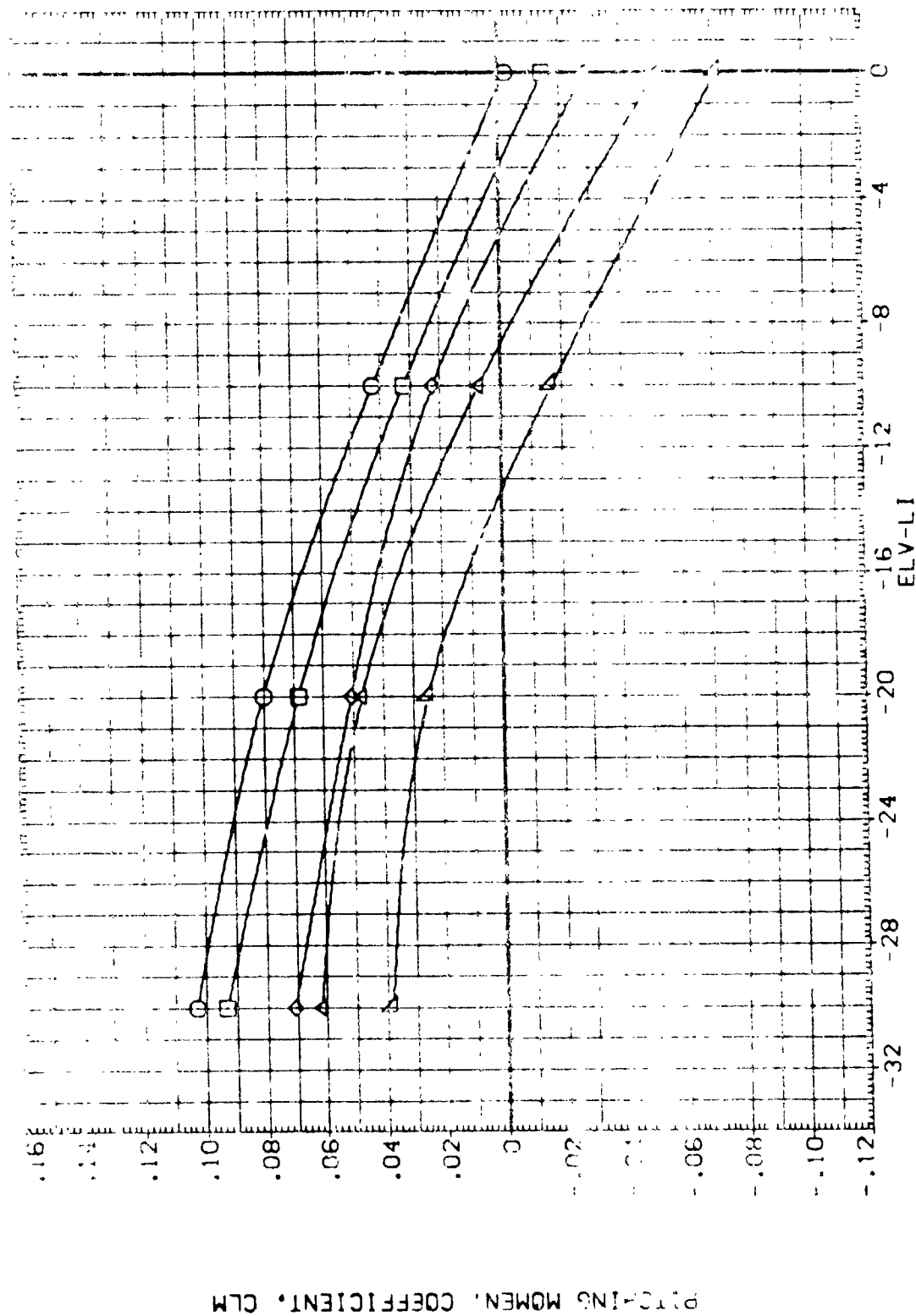


FIGURE 8. INBOARD ELEVON PITCH CONTROL EFFECTIVENESS, LOUFGARD ELEVONS (NORMAL)

$$(R)_{MACH} = .30$$

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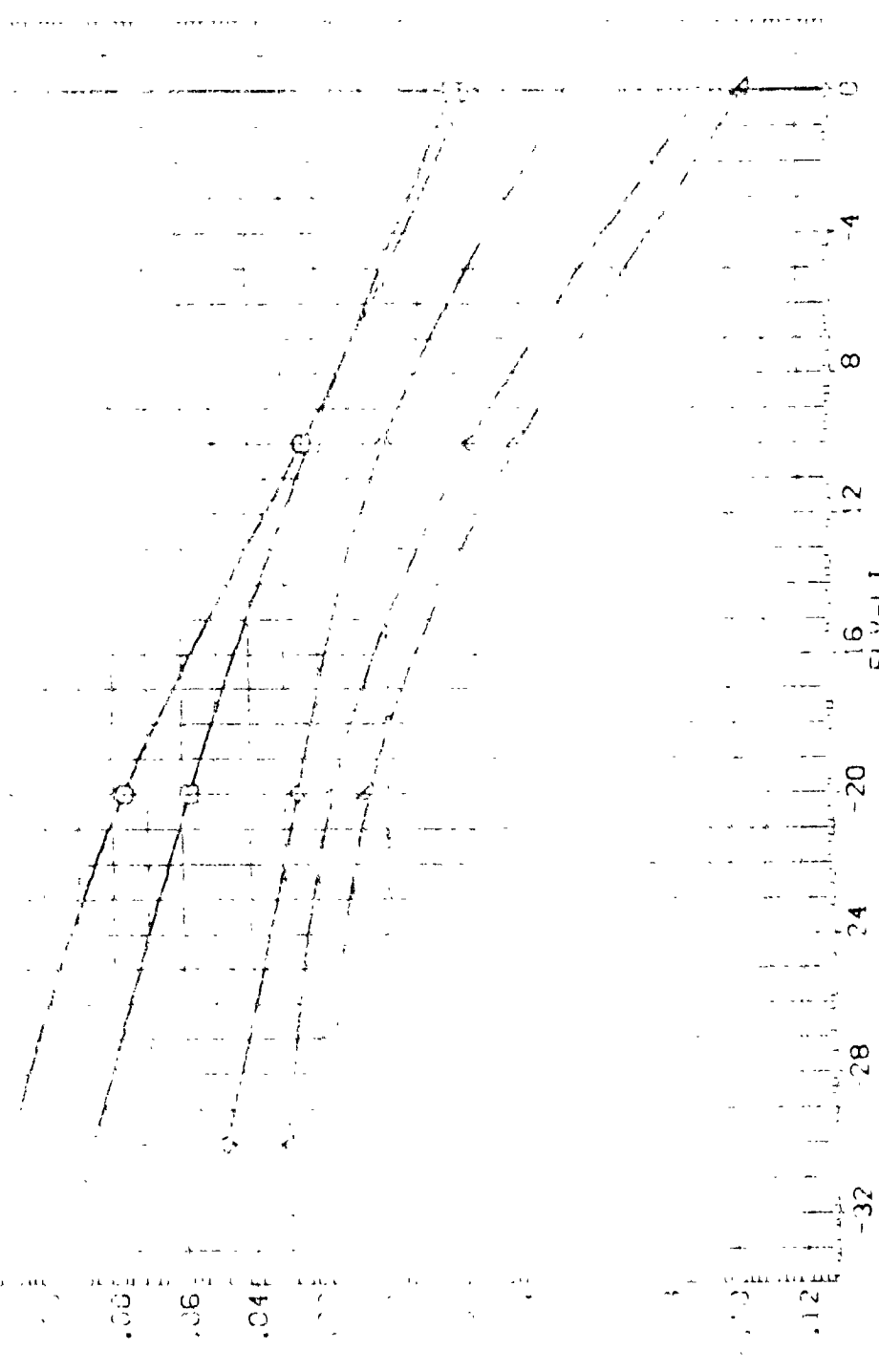
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INBOARD ELEVON PITCH CONTROL EFFECTIVENESS, CLM

FIGURE 8. INBOARD ELEVON PITCH CONTROL EFFECTIVENESS, (OUTBOARD ELEVONS - INBOARD)

(M)MACH = .30



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DATA SET SMD-
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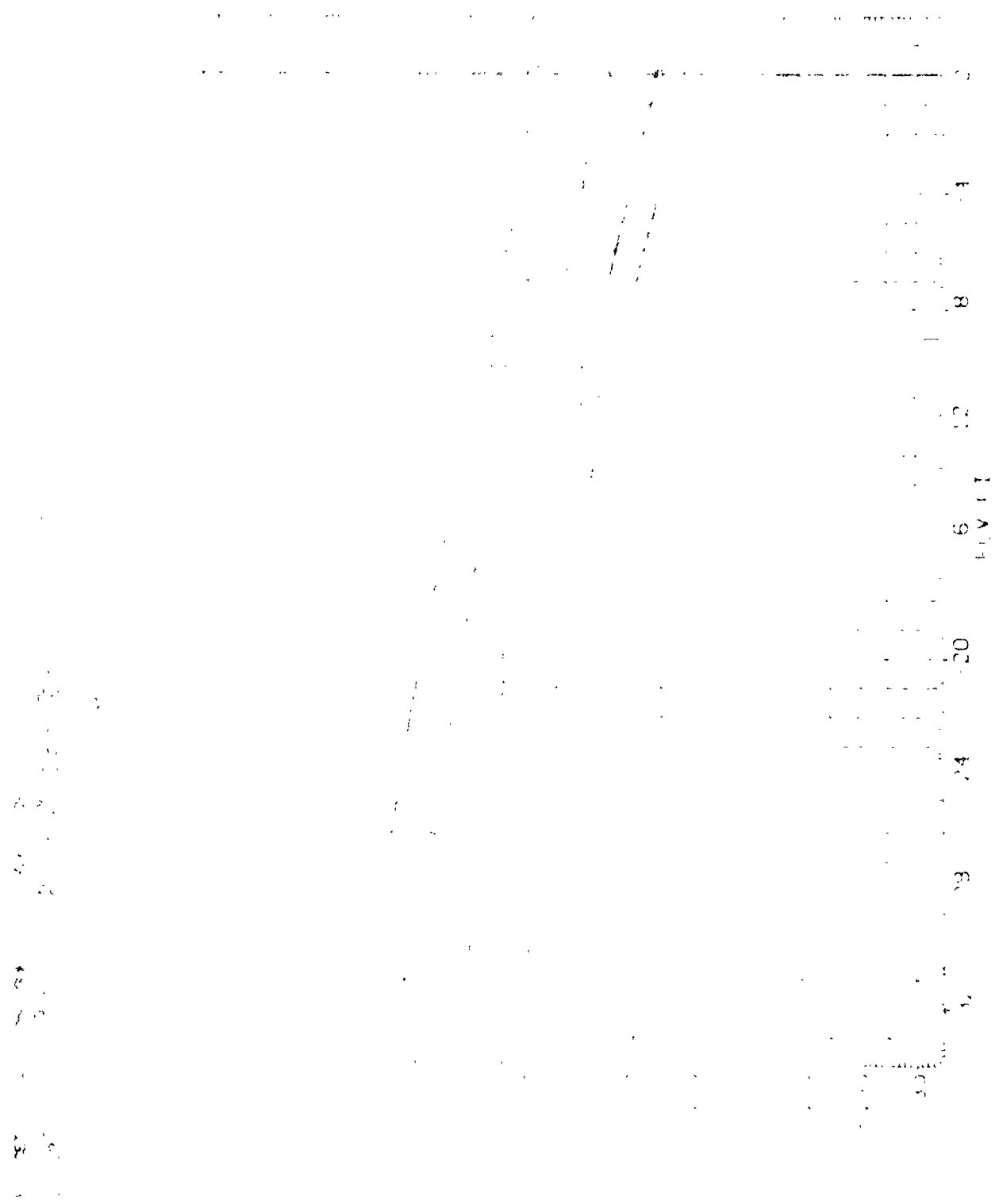
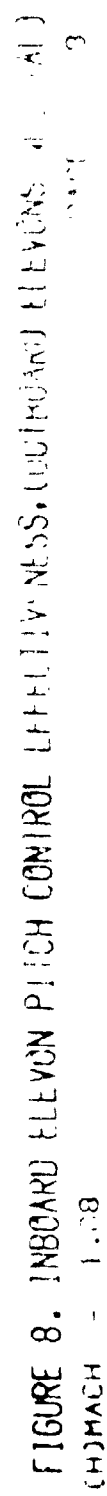


FIGURE 8. INFRARED ELEVEN PITCH CONTROL CHARACTERISTICS, UPWARD ELEVATIONS (a) UPWARD ELEVATIONS (b) DOWNWARD ELEVATIONS



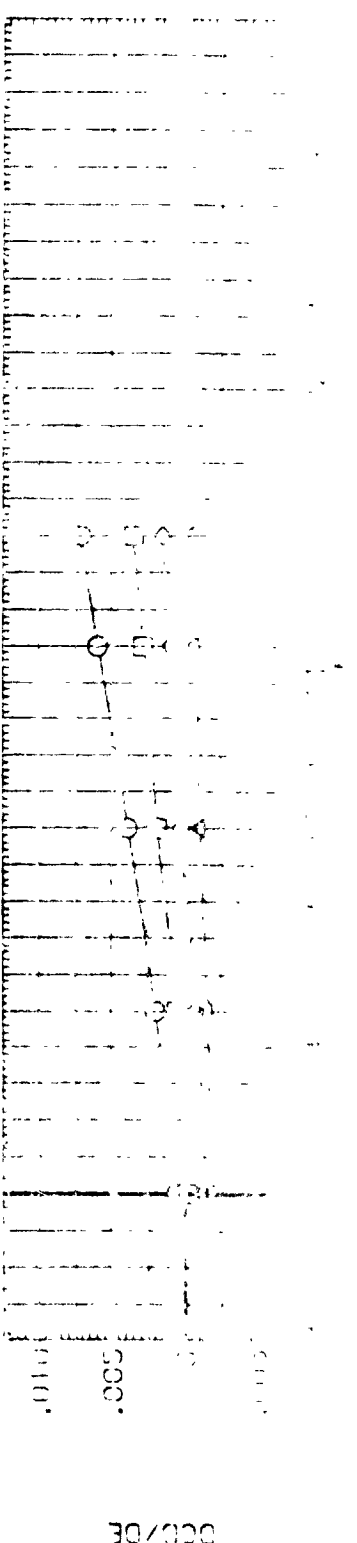
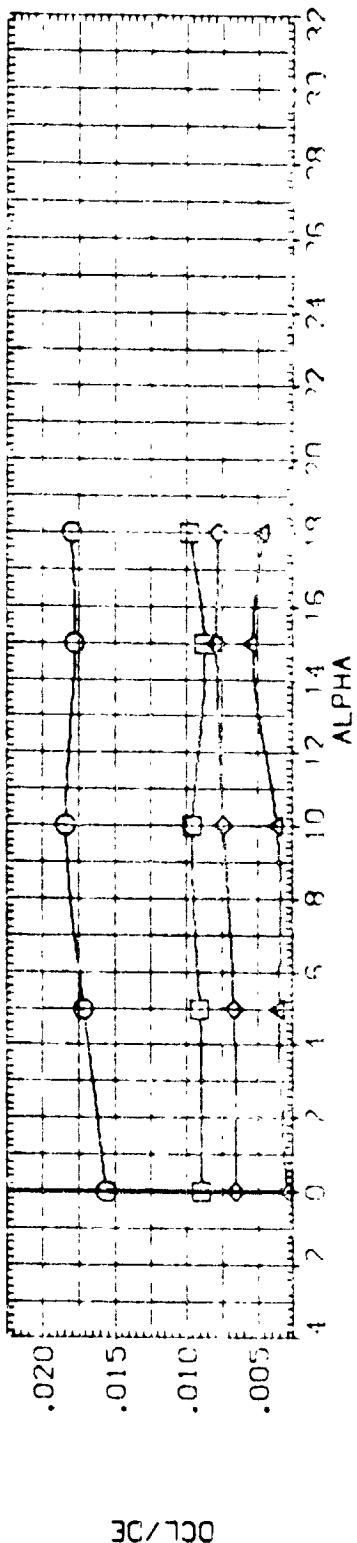
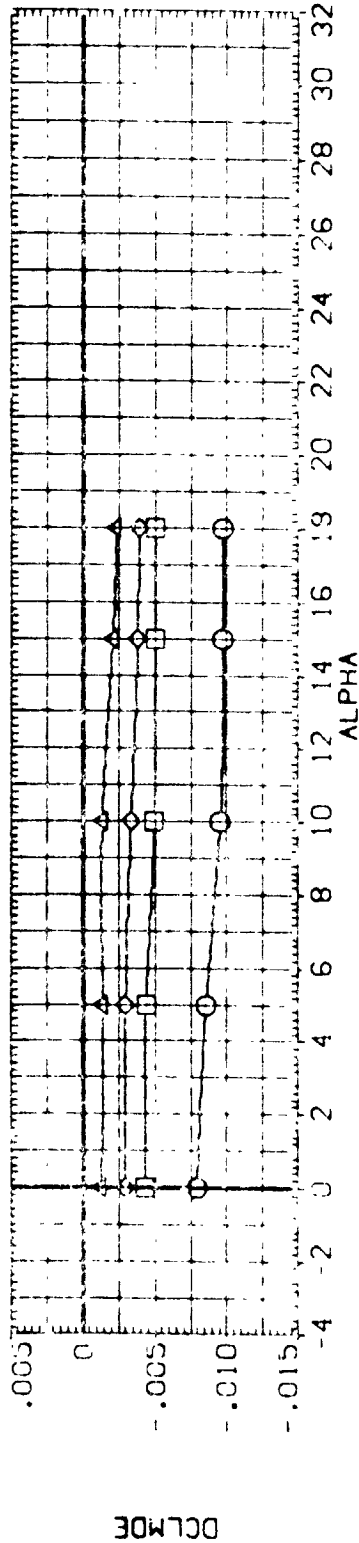


CH₃CH - 1.08

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DATA SET SYMBOL CONFIGURATION DESCRIPTION

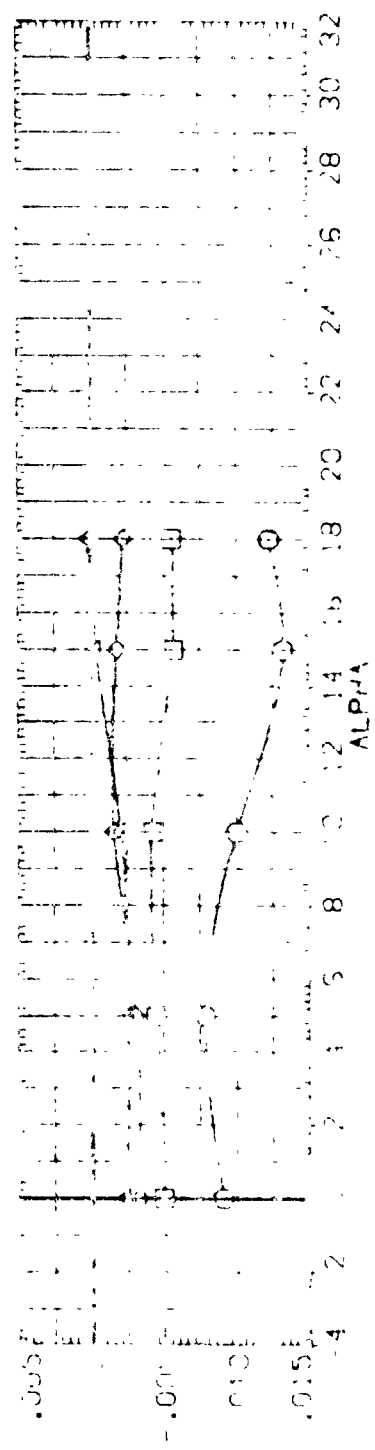
(CH1001)	LA-48 8-FT TPT 640 R	-0058/129	078	SPLIT ELEVON	ELV-L0	ELV-L1	ELV-R1	ELV-R0
(CH1002)	LA-13 8-FT TPT 640 R	-0058/129	078	SPLIT ELEVON	.000	.000	.000	.000
(CH1003)	LA-13 8-FT TPT 640 R	-0058/129	078	SPLIT ELEVON	.000	-10.000	-10.000	.000
(CH1004)	LA-13 8-FT TPT 640 R	-0058/129	078	SPLIT ELEVON	.000	-20.000	-20.000	.000
(CH1005)	LA-13 8-FT TPT 640 R	-0058/129	078	SPLIT ELEVON	.000	-30.000	-30.000	.000



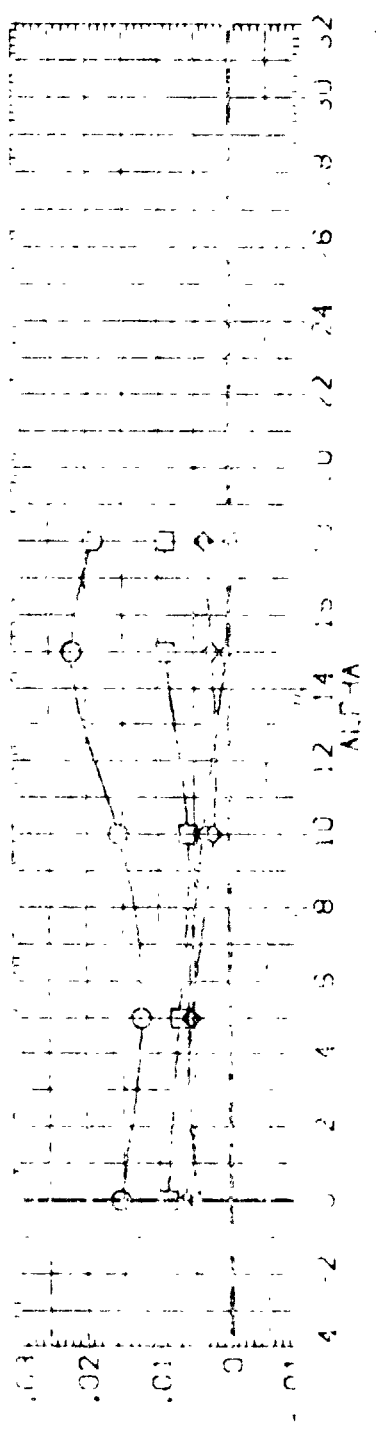
DATA SET SYNOG CRYSTAL DESCRIPTION
 (CH1001) LA 18 2 01 40 RI-CHRY 5 433 SALT FLEVEN
 (CH1002) LA 14 2 01 40 RI-CHRY 30 023 SALT FLEVEN
 (CH1003) LA 14 2 01 40 RI-CHRY 30 023 SALT FLEVEN
 (CH1004) LA 14 2 01 40 RI-CHRY 30 023 SALT FLEVEN

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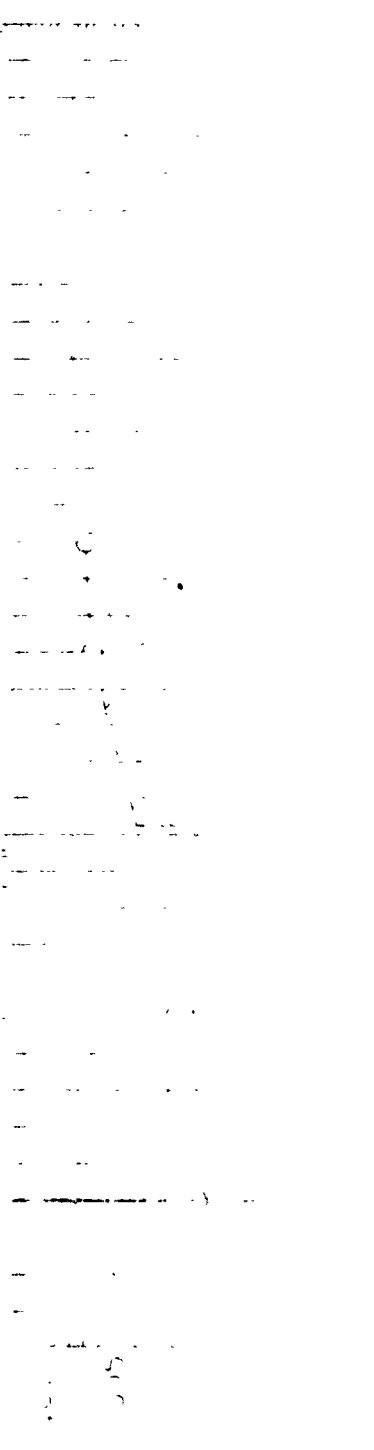
DC/LMDE



DC/LMDE



DC/LMDE



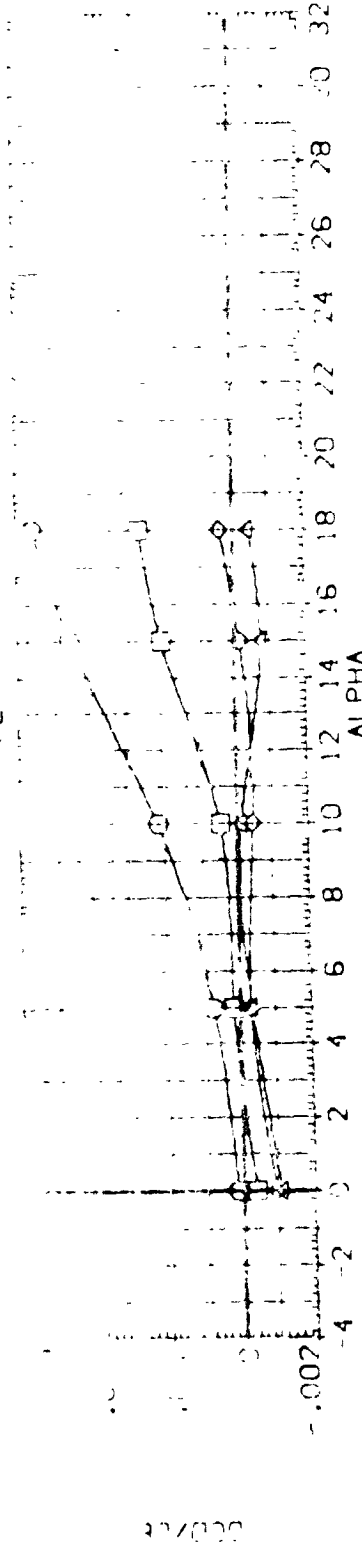
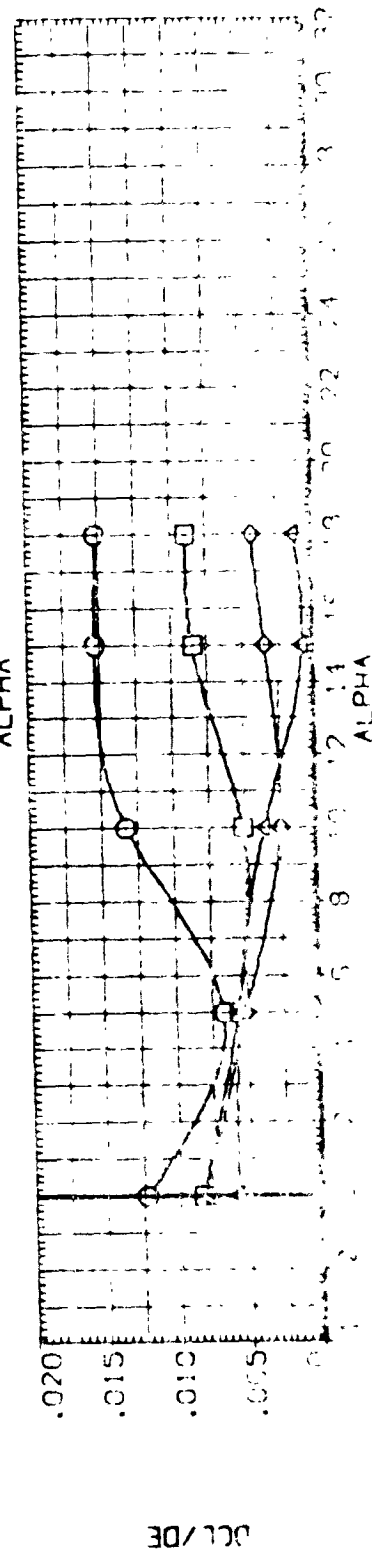
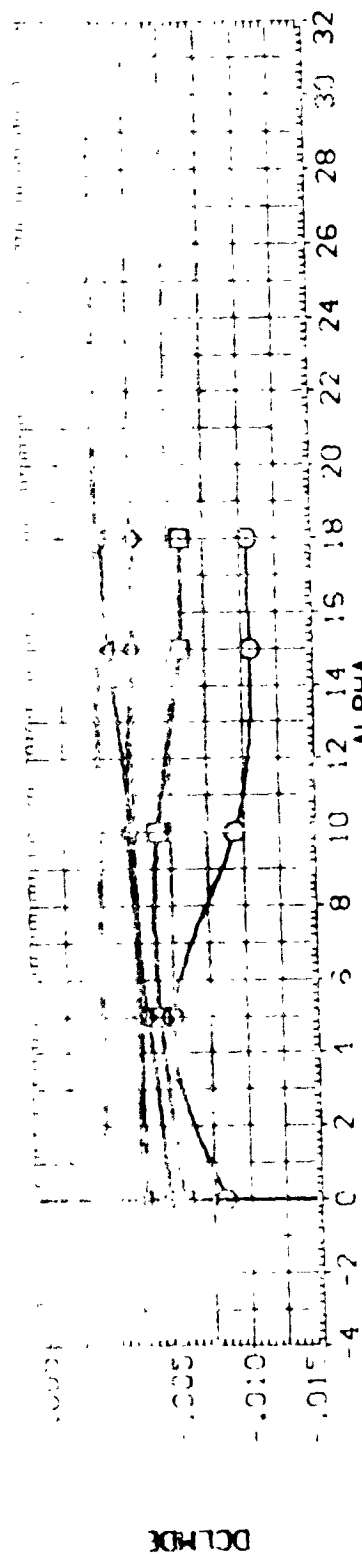


FIGURE 8. INBOARD ELEVON PITCH CONTROL EFFECTIVENESS, OUTBOARD ELEVONS NOT PAID
(MACH = 0.90)

FLY-LO 1000 1000 1000
FLY-LO 1000 1000 1000
FLY-LO 1000 1000 1000

FLY-LO 1000 1000 1000
FLY-LO 1000 1000 1000
FLY-LO 1000 1000 1000

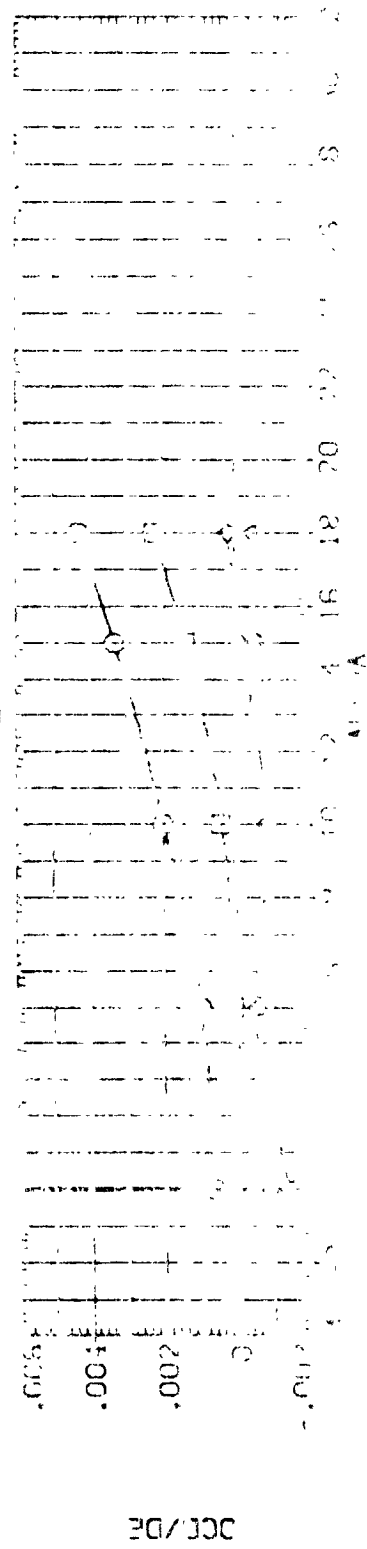
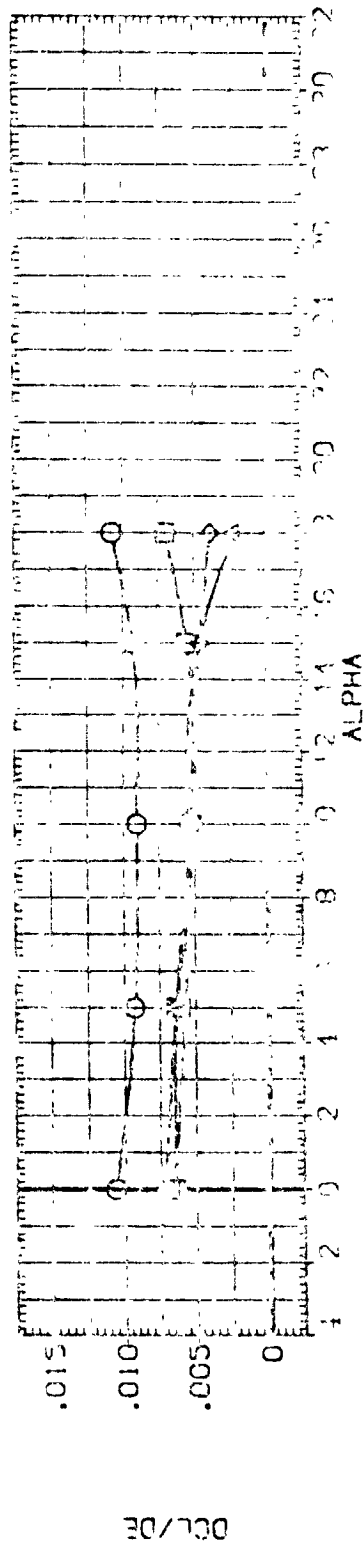
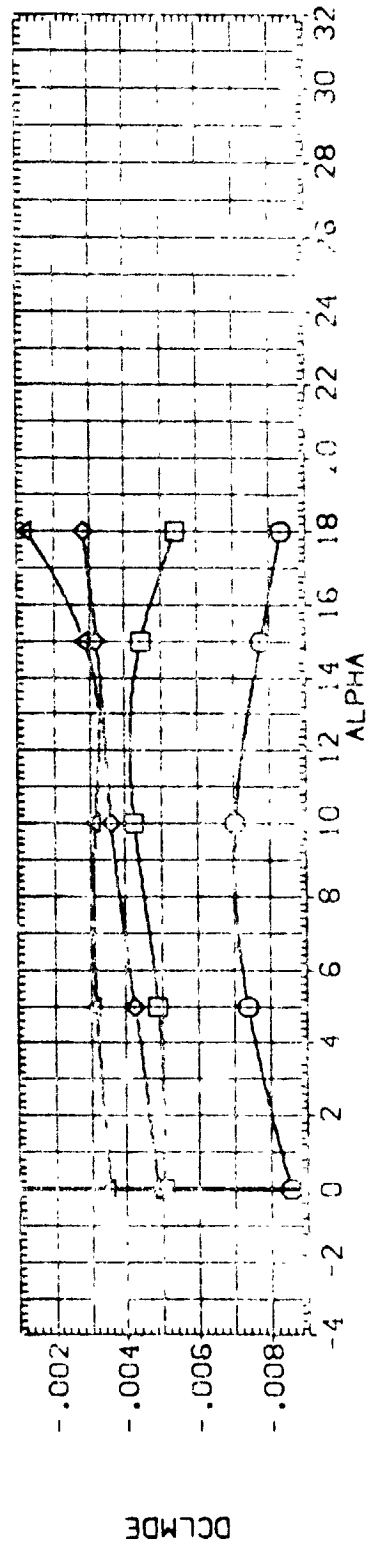
FLY-LO 1000 1000 1000
FLY-LO 1000 1000 1000
FLY-LO 1000 1000 1000



FIGURE 1. 1960-1961
1962-1963



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0
(C1)001)	LA-18 8-FT IPT 580 R1-0659/13 018 SPL IT ELEVON	.000	.000	.000	.000
(C1)002)	LA-18 8-FT IPT 580 R1-0659/13 018 SPL IT ELEVON	.000	-10.000	-10.000	.000
(C1)003)	LA-18 8-FT IPT 580 R1-0659/13 018 SPL IT ELEVON	.000	-20.000	-20.000	.000
(C1)004)	LA-18 8-FT IPT 580 R1-0659/13 018 SPL IT ELEVON	.000	-30.000	-30.000	.000



DATA SET SYMBOL CONFIGURATION DESCRIPTION ELEVATION ELEVATION ELEVATION

CH1001	A-48 3-FT PT 500 R1-0858/35	048 SPL 11 ELEVON	000	000
CH1002	A-48 3-FT PT 500 R1-0858/35	048 SPL 11 ELEVON	000	000
CH1003	A-48 3-FT PT 500 R1-0858/35	048 SPL 11 ELEVON	000	000
CH1004	A-48 3-FT PT 500 R1-0858/35	048 SPL 11 ELEVON	000	000

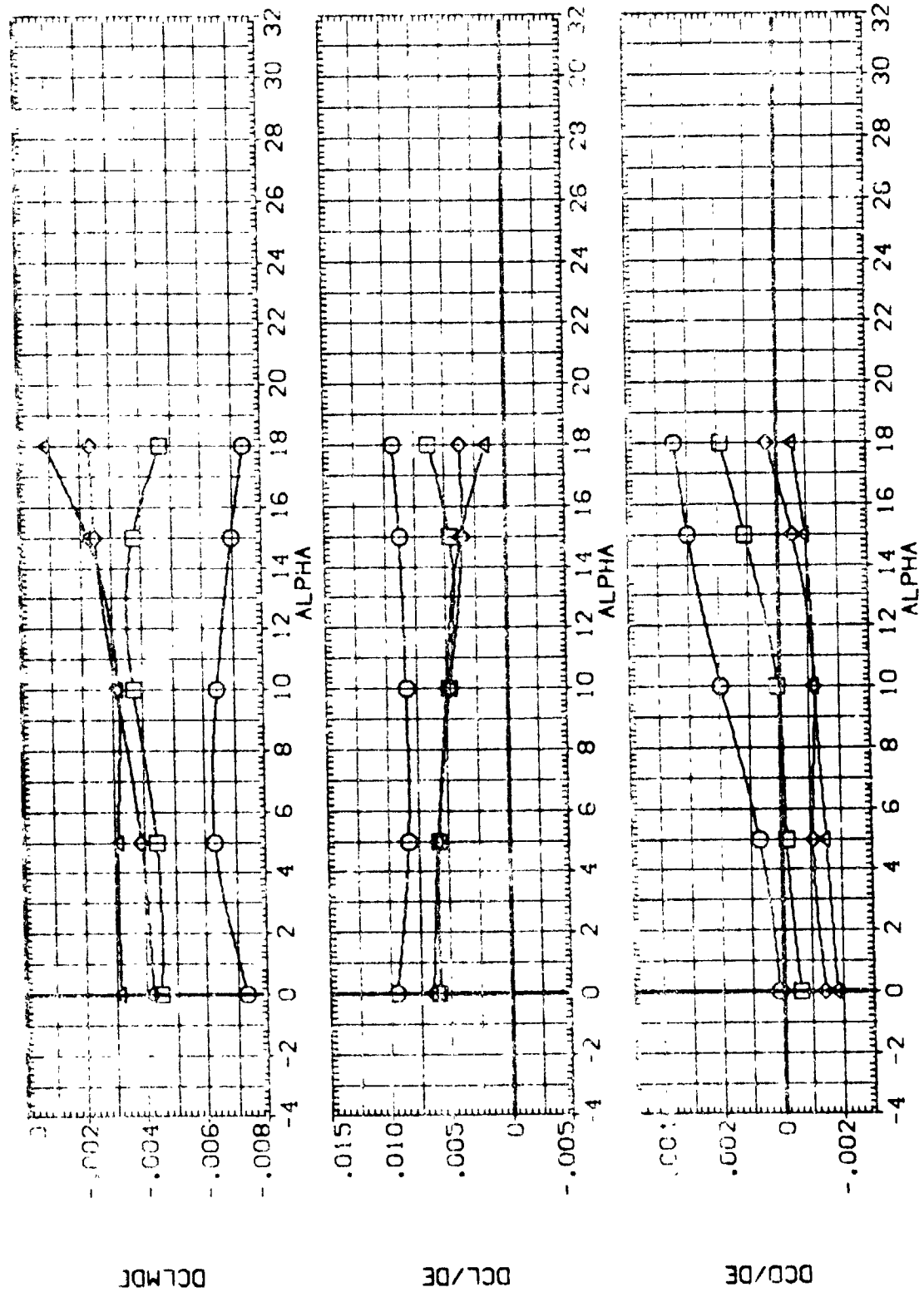


FIGURE 8. INBOARD ELEVON PITCH CONTROL EFFECTIVENESS. (OUTBOARD ELEVONS NEUTRAL)
(M)MACH = 1.08 PAGE 36

DATA SET SYMBOL CONFIGURATION DESCRIPTION EL/FWD EL/AFT V-41 V-42

LA-48 9-FT TPT 580 RI-2953/39 058 SAL IT ELEVON 000 000 000 000

LA-48 8-FT TPT 580 RI-0638/39 058 SAL IT ELEVON 000 000 000 000

LA-48 8-FT TPT 580 RI-0638/39 058 SAL IT ELEVON 000 000 000 000

LA-48 8-FT TPT 580 RI-0638/39 058 SAL IT ELEVON 000 000 000 000

LA-48 8-FT TPT 580 RI-0638/39 058 SAL IT ELEVON 000 000 000 000

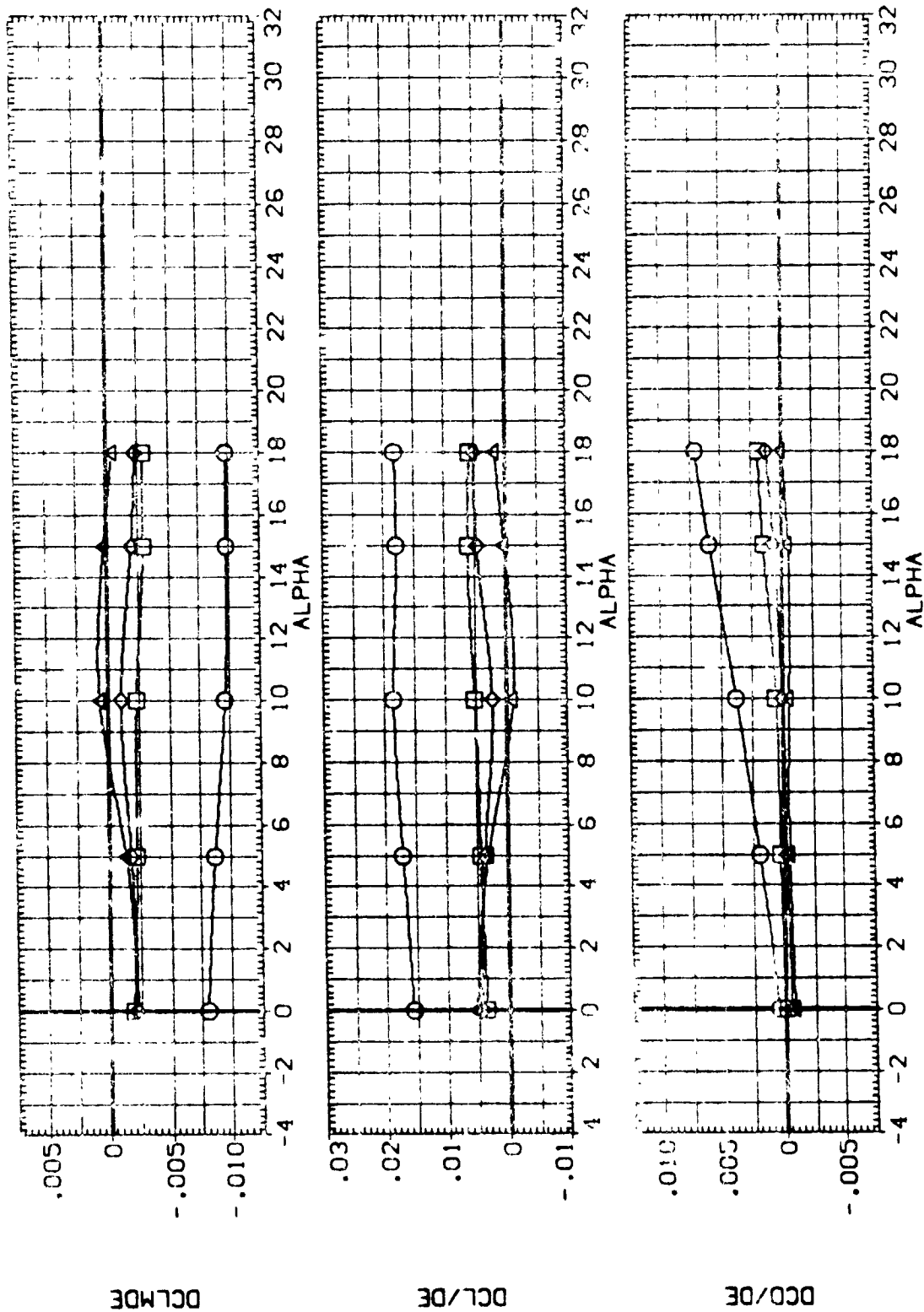


FIGURE 9. OUTBOARD ELEVON PITCH CONTROL EFFECTIVENESS, (INBOARD ELEVONS NEUTRAL)
 ,AJMACH = .60 PAGE 68

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0
(CH1005)	LA-48 8-FT IPT 680 RI-0398/139 098 SPL IT ELEVON	-10.000	-10.000	-10.000	-10.000
(CH1002)	LA-48 8-FT IPT 680 RI-0398/139 098 SPL IT ELEVON	-10.000	-10.000	-10.000	-10.000
(CH1006)	LA-48 8-FT IPT 680 RI-0398/139 098 SPL IT ELEVON	-20.000	-20.000	-20.000	-20.000
(CH1003)	LA-48 8-FT IPT 680 RI-0398/139 098 SPL IT ELEVON	-20.000	-20.000	-20.000	-20.000

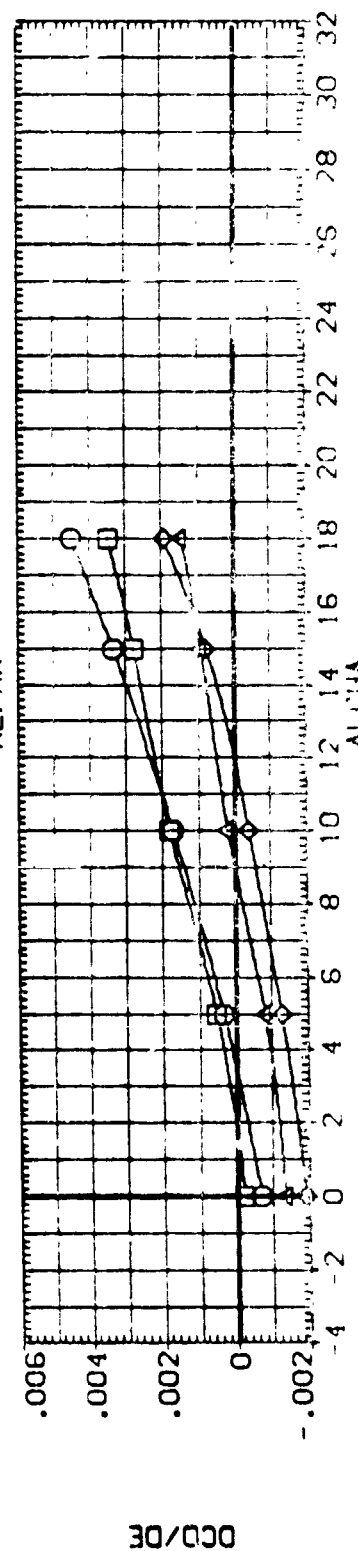
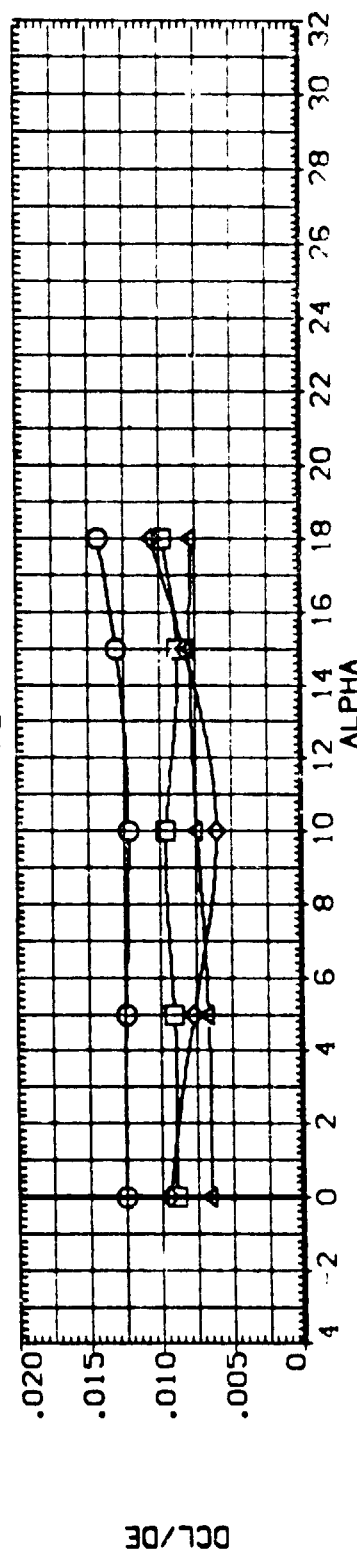
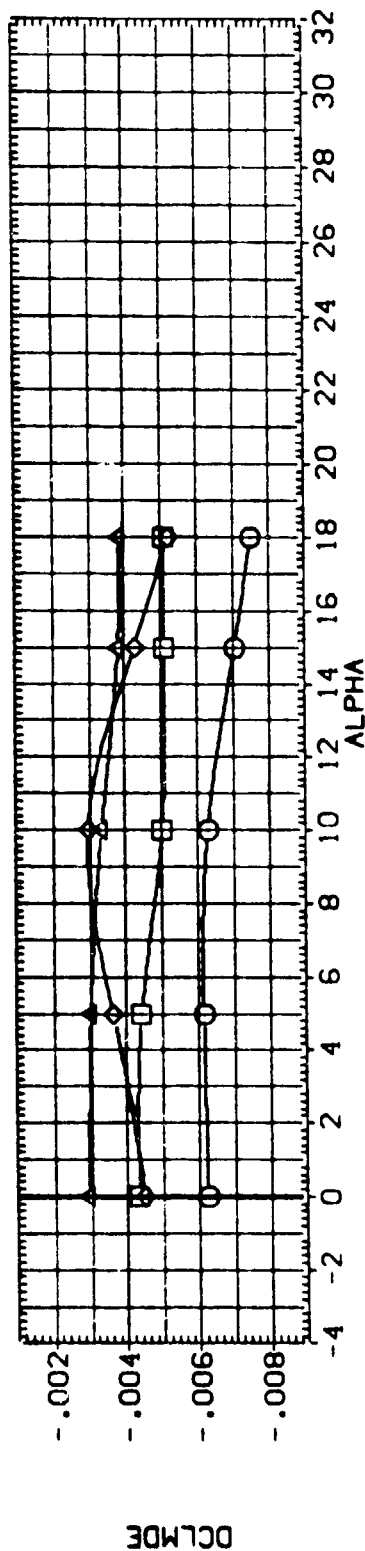


FIGURE 10.10. 30W/DL, 30L/DE, 30D/DE vs ALPHA. (CH1005) (CH1002) (CH1006) (CH1003)

DATA SET SYMBOL CONFIGURATION DESCRIPTION ELV-L0 ELV-L1 ELV-R1 ELV-R0

{CH1005} LA-48 8-FT IPT 680 R1 -0898/139 058 SPL IT ELEVON -10.000 -10.000 -10.000 -10.000

{CH1002} LA-48 8-FT IPT 680 R1 -0898/139 058 SPL IT ELEVON -10.000 -10.000 -10.000 -10.000

{CH1006} LA-48 8-FT IPT 680 R1 -0898/139 058 SPL IT ELEVON -20.000 -20.000 -20.000 -20.000

{CH1003} LA-48 8-FT IPT 680 R1 -0898/139 058 SPL IT ELEVON -20.000 -20.000 -20.000 -20.000

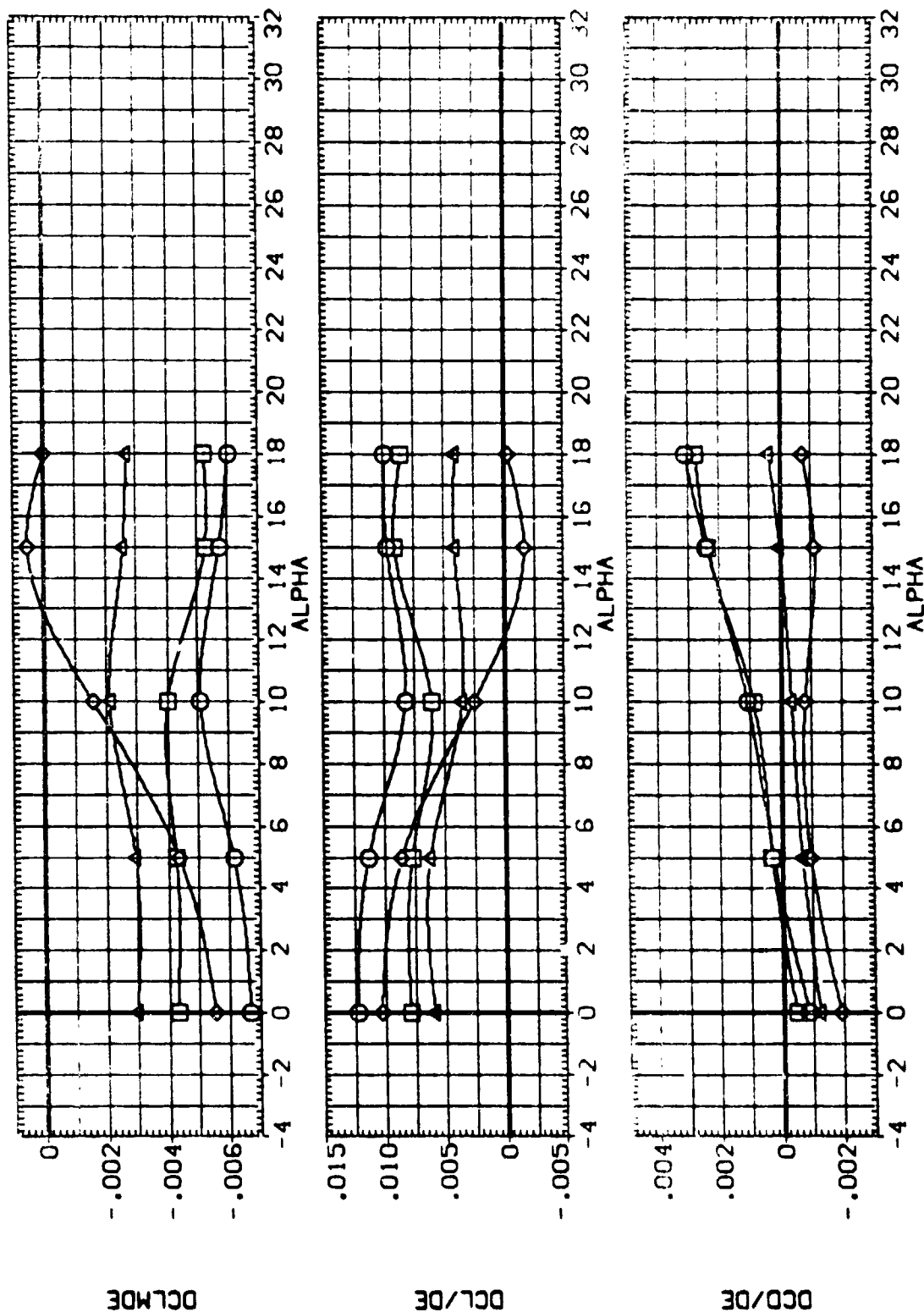


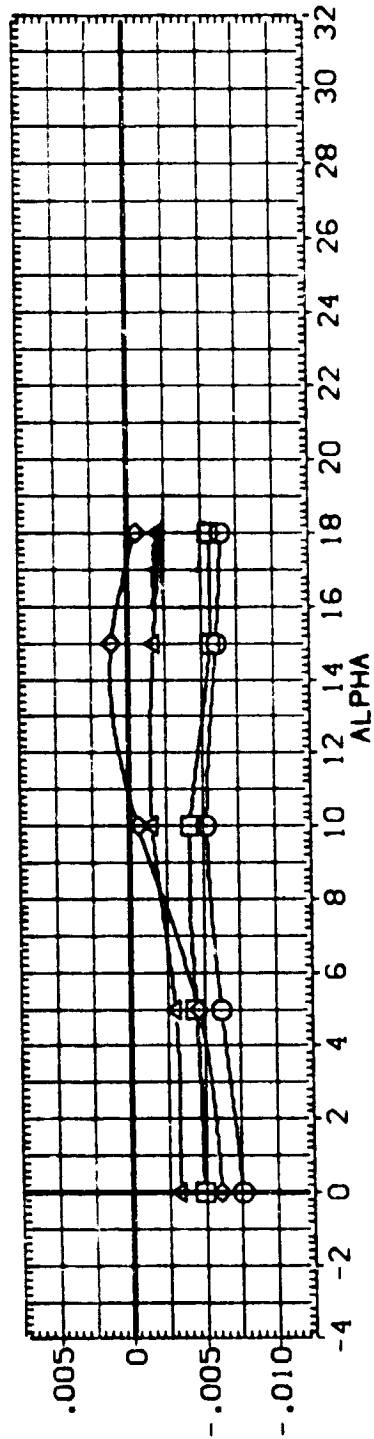
FIGURE 10. COMPARISON OF FULL SPAN AND INBOARD PITCH CONTROL EFFECTIVENESS

(B) MACH = .80

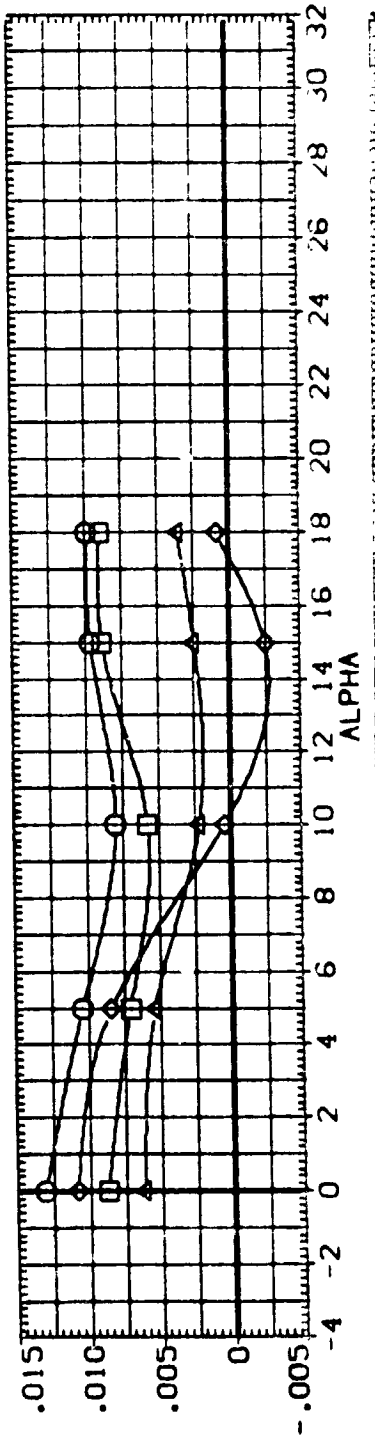


DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CH1005) LA-48 8-FT TPT 680 RI-0898/139 078 SPL IT ELEVON
 (CH1002) LA-48 8-FT TPT 680 RI-0898/139 078 SPL IT ELEVON
 (CH1006) LA-48 8-FT TPT 680 RI-0898/139 078 SPL IT ELEVON
 (CH1003) LA-48 8-FT TPT 680 RI-0898/139 078 SPL IT ELEVON

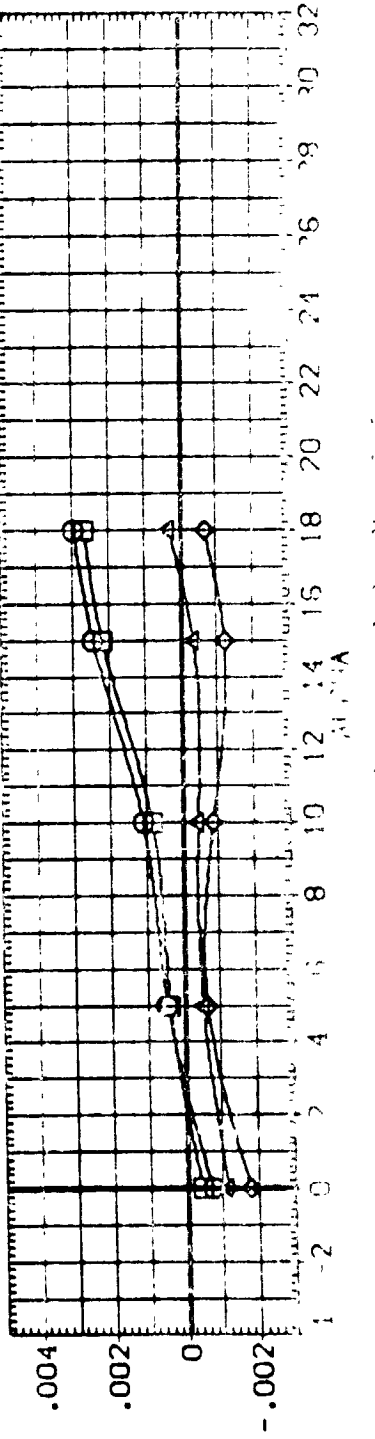
ELV-L0 ELV-L1 ELV-R1 ELV-R0
 -10.000 -10.000 -10.000 -10.000
 -20.000 -20.000 -20.000 -20.000
 .000 .000 .000 .000



DCLMDE



DCL/DE



DCL/DE

DATA SET SYMBOL CONFIGURATION DESCRIPTION ELEV-LO ELEV-LI ELEV-RI ELEV-RO

{CH1005} LA-48 8-FT TPT 680 R -0898/39 098 SPL IT ELEVON -10.000 -10.000 -10.000 -10.000

{CH1002} LA-48 8-FT IPT 680 R -0898/39 098 SPL IT ELEVON -10.000 -10.000 -10.000 -10.000

{CH1006} LA-48 8-FT IPT 680 R -0898/39 098 SPL IT ELEVON -20.000 -20.000 -20.000 -20.000

{CH1003} LA-48 8-FT IPT 680 R -0898/39 098 SPL IT ELEVON -20.000 -20.000 -20.000 -20.000

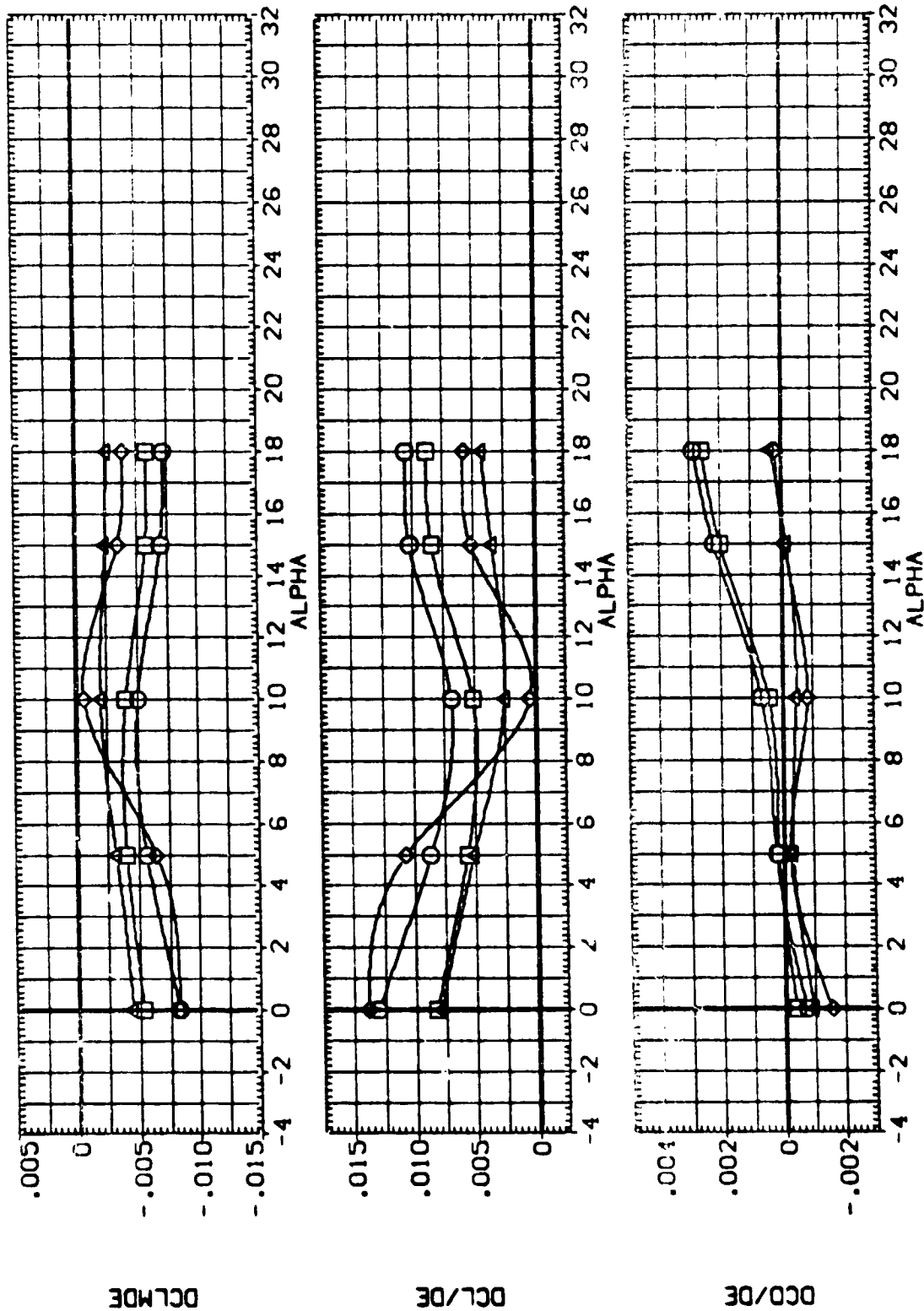


FIGURE 10. COMPARISON OF FULL SPAN AND INBOARD PITCH CONTROL EFFECTIVENESS

(O)MACH = .90

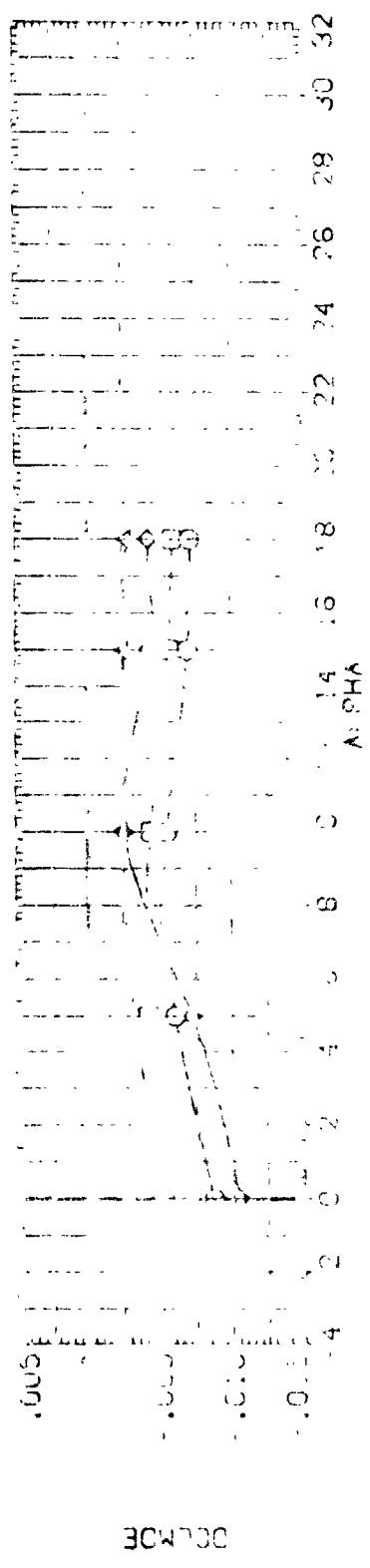
DATA SET SYMBOL CONFIGURATION DESCRIPTION ELEV-L ELEV-R ELEV-R0

(0-1005) LA-48 6-ET 1PT 680 RI -0852/139 0-8 SPL IT ELEVON -10,000 -10,000 -10,000

(0-1002) LA-48 8-ET 1PT 680 RI -0852/139 0-8 SPL IT ELEVON -10,000 -10,000 -10,000

(0-1006) LA-48 9-ET 1PT 680 RI -0852/139 0-8 SPL IT ELEVON -10,000 -10,000 -10,000

(0-1003) LA-48 13-ET 1PT 680 RI -0852/139 0-8 SPL IT ELEVON -10,000 -10,000 -10,000



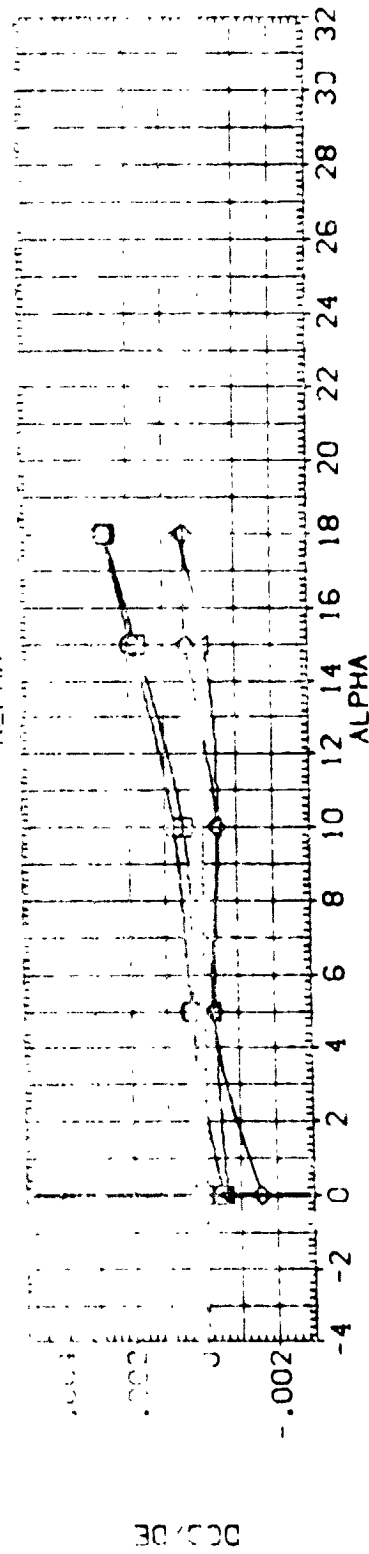
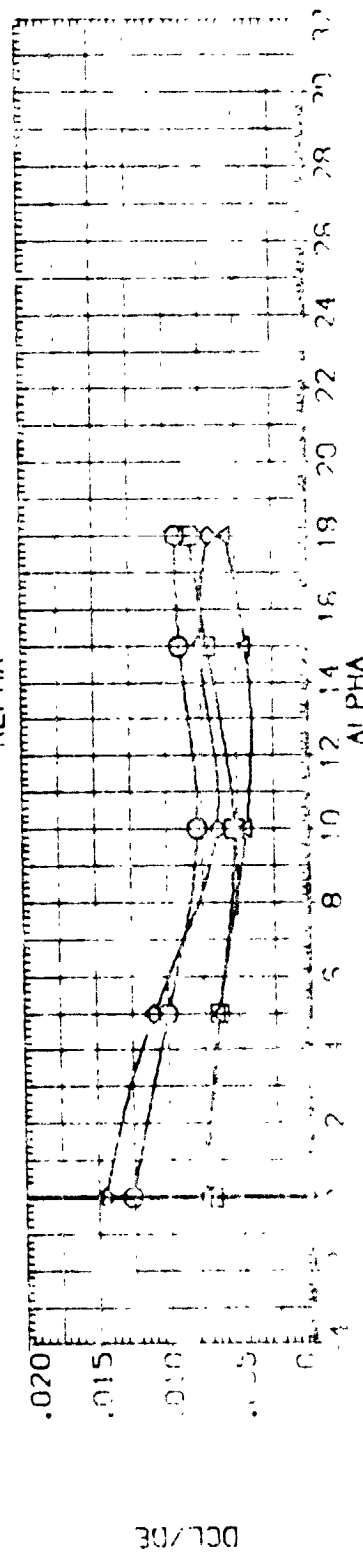
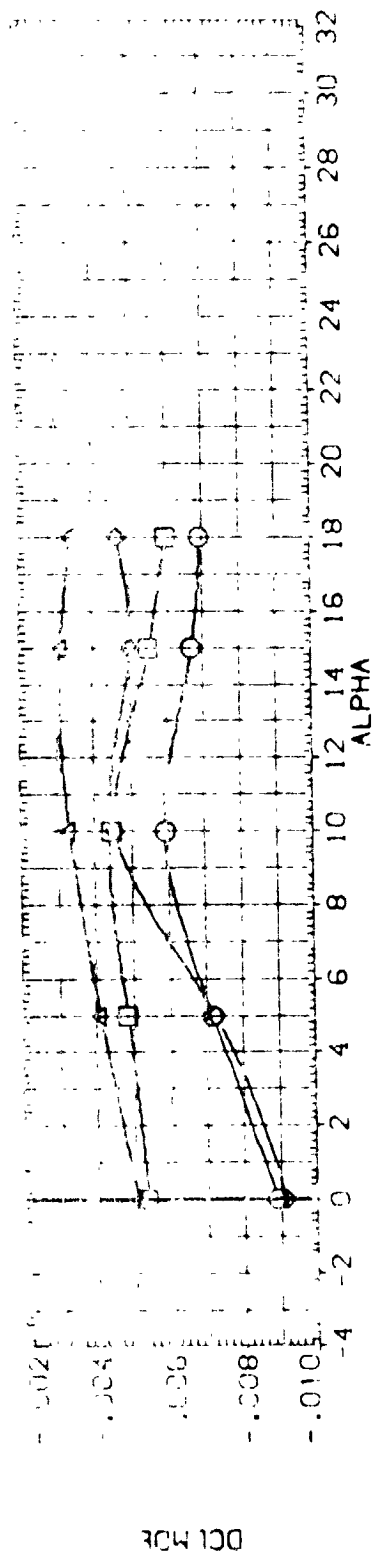
1.

FIGURE 10. COMPARISON OF FULL SPAN AND INBOARD PITCH CONTROL EFFECTIVENESS

(F)MACH = .95	PAGE	74
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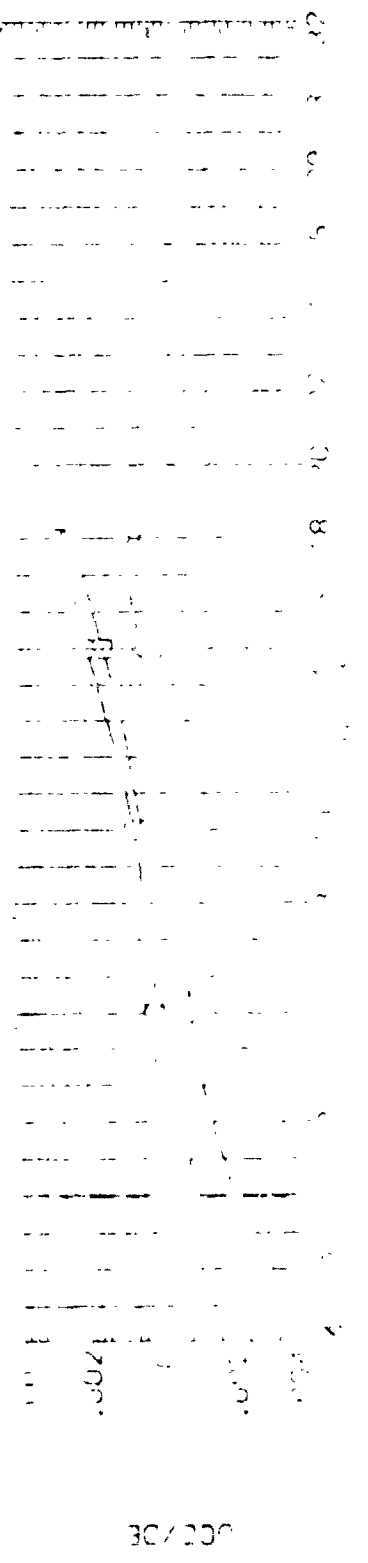
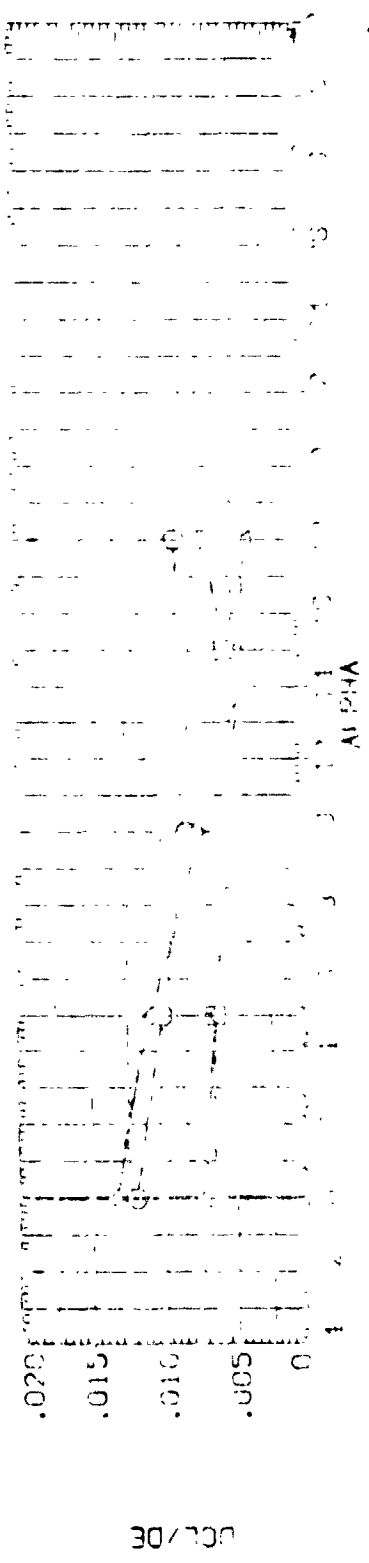
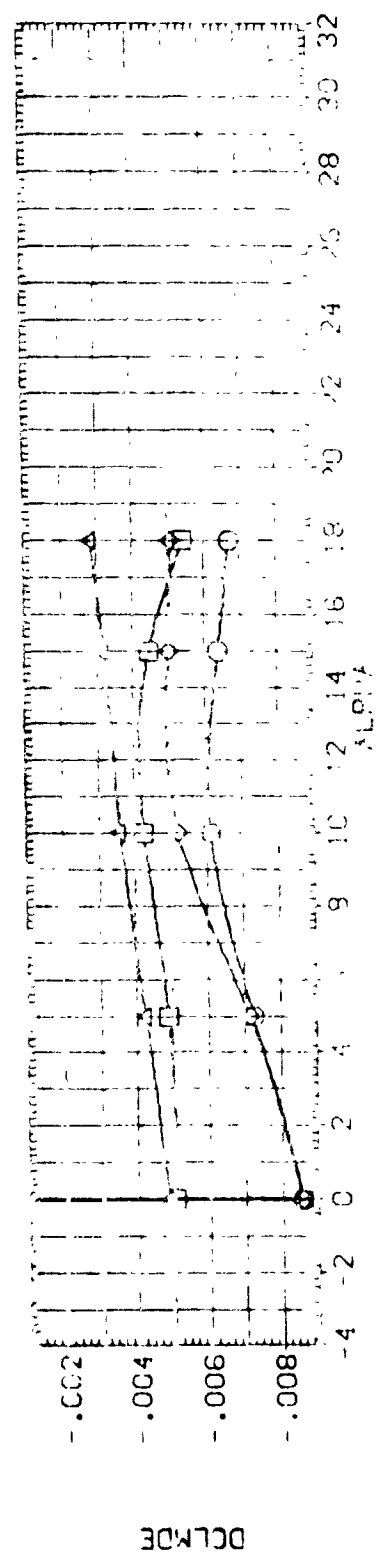
DATA SET SYMBOL CONFIGURATION DESCRIPTION ELV-L0 ELV-L1 ELV-R1 ELV-R0

(CH1005) LA-48 8-FT TPT C20 RI-0899/33 008 SPL IT ELEVON -10.000 -10.000 -10.000 -10.000

(CH1002) LA-48 8-FT TPT C20 RI-0899/39 008 SPL IT ELEVON -10.000 -10.000 -10.000 -10.000

(CH1006) LA-48 8-FT TPT C20 RI-0899/39 008 SPL IT ELEVON -10.000 -10.000 -10.000 -10.000

(CH1003) LA-48 8-FT TPT C20 RI-0899/39 008 SPL IT ELEVON -10.000 -10.000 -10.000 -10.000



DCL/DE

DCL/DE

DCL/DE

88788
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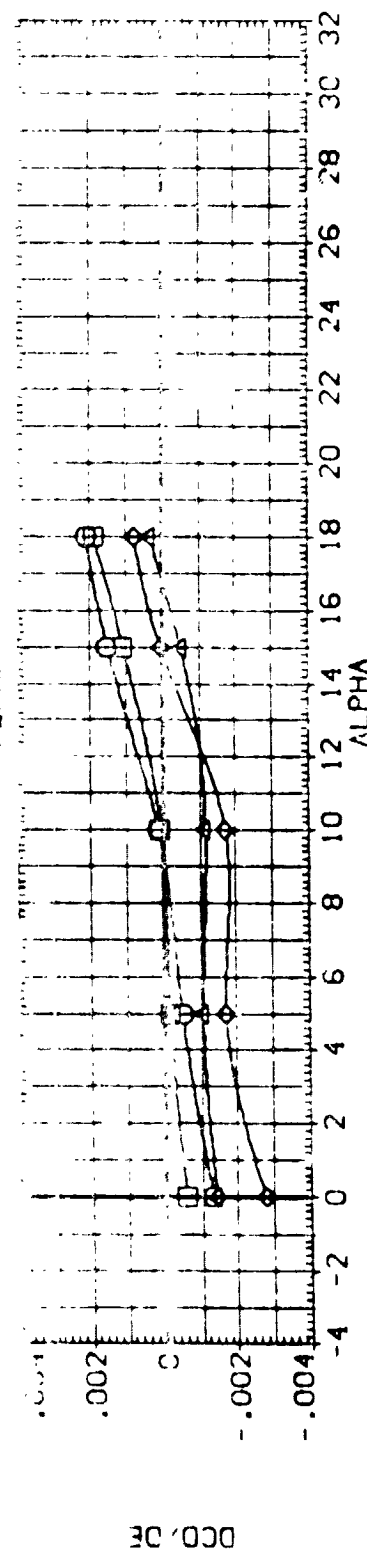
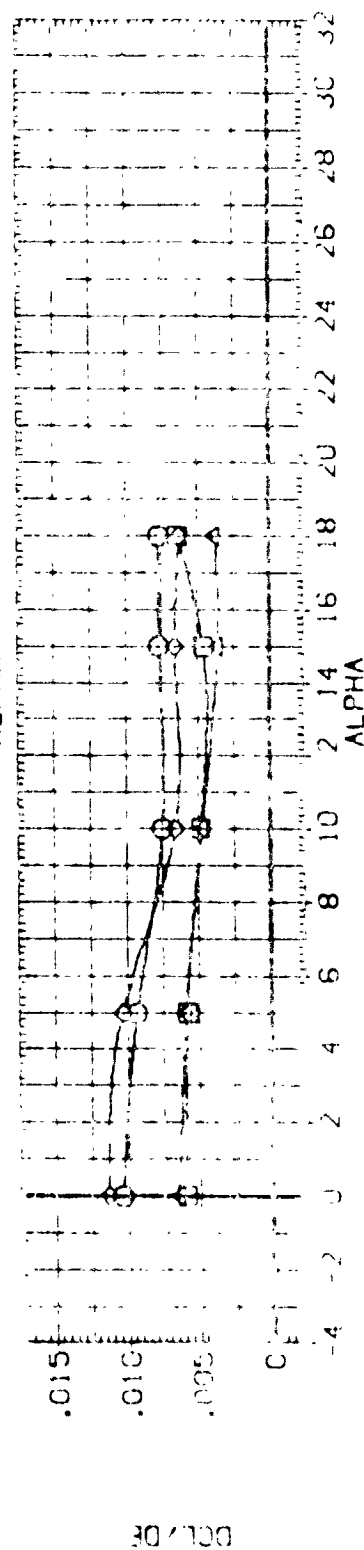
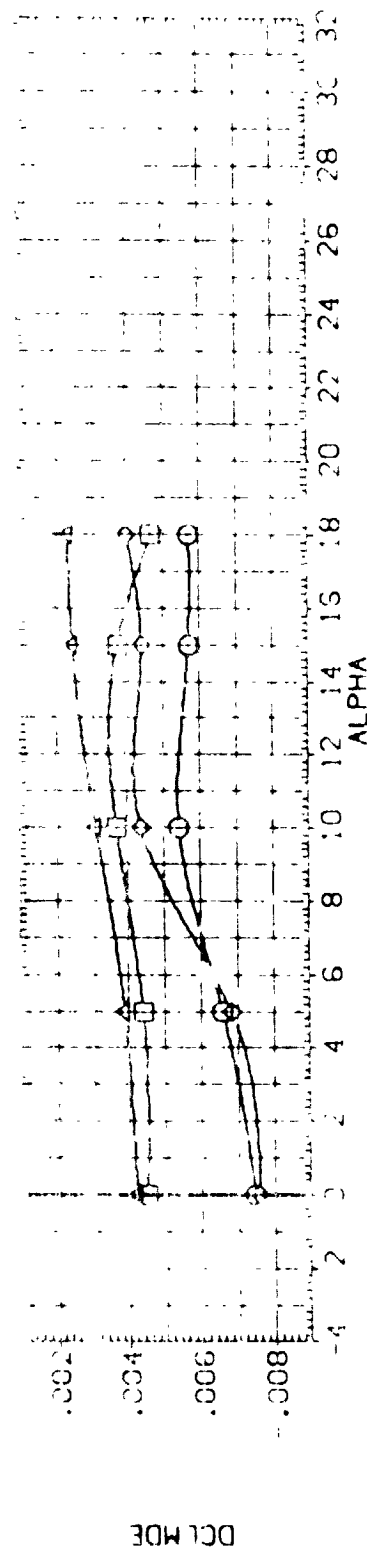


FIGURE 10. COMPARISON OF FULL SPAN AND INBOARD PITCH CONTROL EFFECTIVENESS

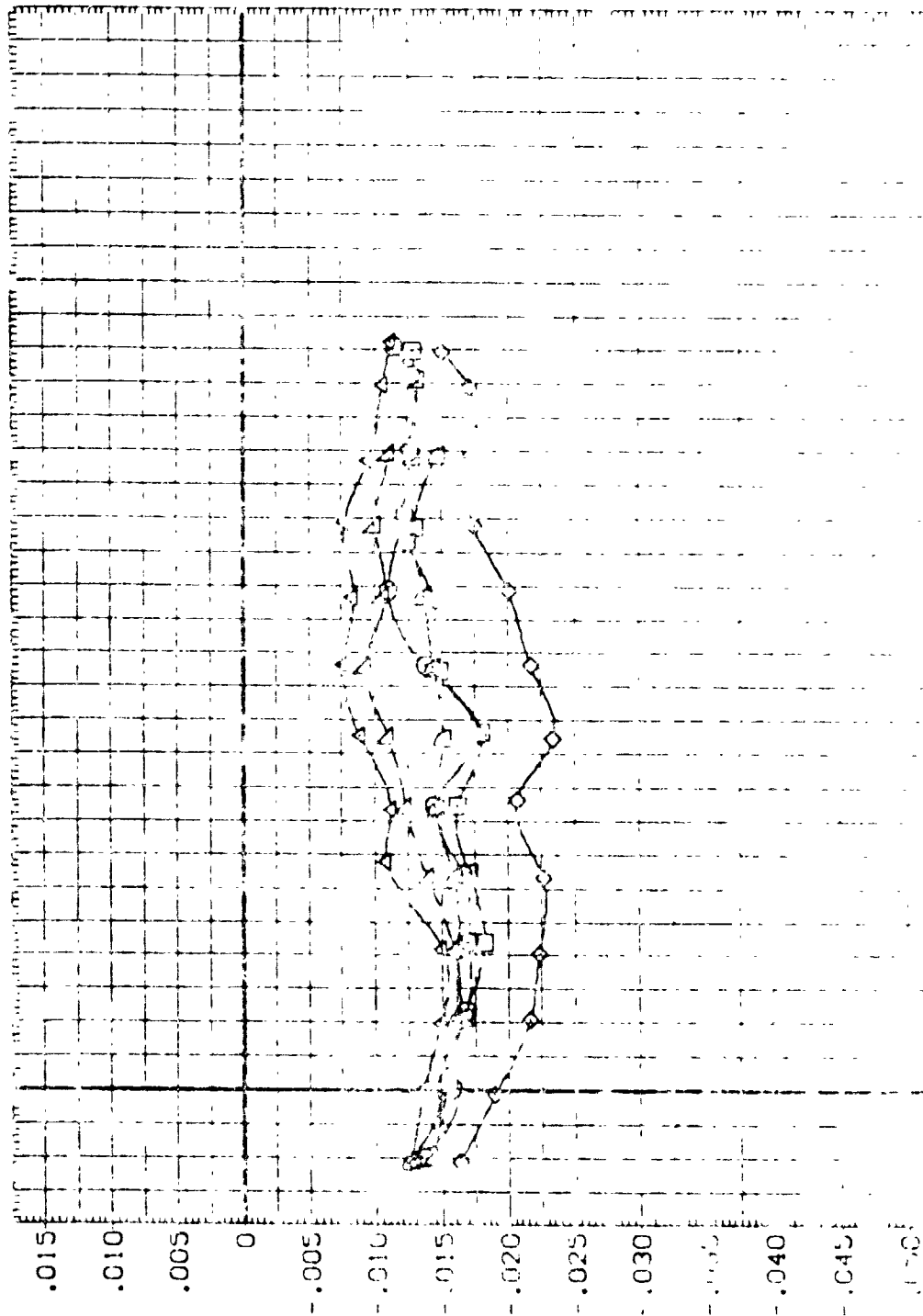
$$(H)MACH = 1.08$$

PAGE 3

91.

SIDE FORCE COEFFICIENT, CY

DATA SET	SYMBOL	COORDINATION	DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0
[A1]007	○	LA-18	8-FT PT 580 R1 0503/39 048 SPL IT ELEVON	5.000	.000	.000	-5.000
[A1]008	○	LA-18	8-FT PT 580 R1 0503/39 048 SPL IT ELEVON	5.000	-20.000	-20.000	-5.000
[A1]009	○	LA-18	8-FT PT 580 R1 0503/39 048 SPL IT ELEVON	10.000	-20.000	-20.000	-10.000
[A1]010	○	LA-18	8-FT PT 580 R1 0503/39 048 SPL IT ELEVON	15.000	-20.000	-20.000	-15.000
[A1]011	○	LA-18	8-FT PT 580 R1 0503/39 048 SPL IT ELEVON	-10.000	-20.000	-20.000	-30.000
[A1]012	○	LA-18	8-FT PT 580 R1 0503/39 048 SPL IT ELEVON	.000	-10.000	-10.000	-20.000



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DRB	SPLIT	ELEVON	ELEV-H	ELEV-L	TOV-H	TOV-L	ELEV-H	ELEV-L
(AH1007)	LA-18 8-FT TPT 800 RI-0898/139	DRB	SPLIT	ELEVON	5.000	5.000	0.000	0.000	5.000	5.000
(AH1008)	LA-18 8-FT TPT 800 RI-0898/139	DRB	SPLIT	ELEVON	5.000	5.000	0.000	0.000	5.000	5.000
(AH1009)	LA-18 8-FT TPT 800 RI-0898/139	DRB	SPLIT	ELEVON	5.000	5.000	0.000	0.000	5.000	5.000
(AH1010)	LA-18 8-FT TPT 800 RI-0898/139	DRB	SPLIT	ELEVON	5.000	5.000	0.000	0.000	5.000	5.000
(AH1011)	LA-18 8-FT TPT 800 RI-0898/139	DRB	SPLIT	ELEVON	5.000	5.000	0.000	0.000	5.000	5.000
(AH1012)	LA-18 8-FT TPT 800 RI-0898/139	DRB	SPLIT	ELEVON	5.000	5.000	0.000	0.000	5.000	5.000

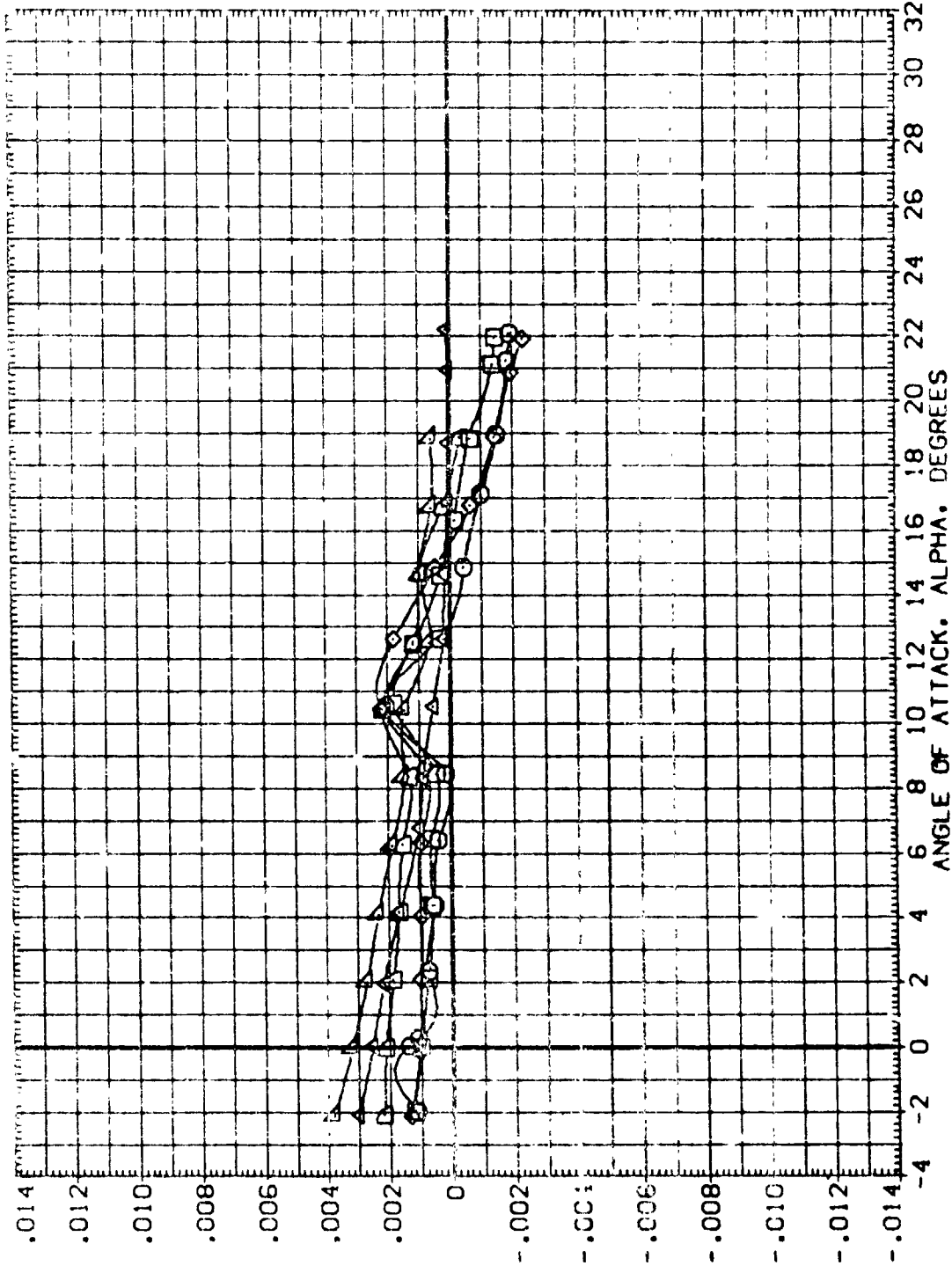
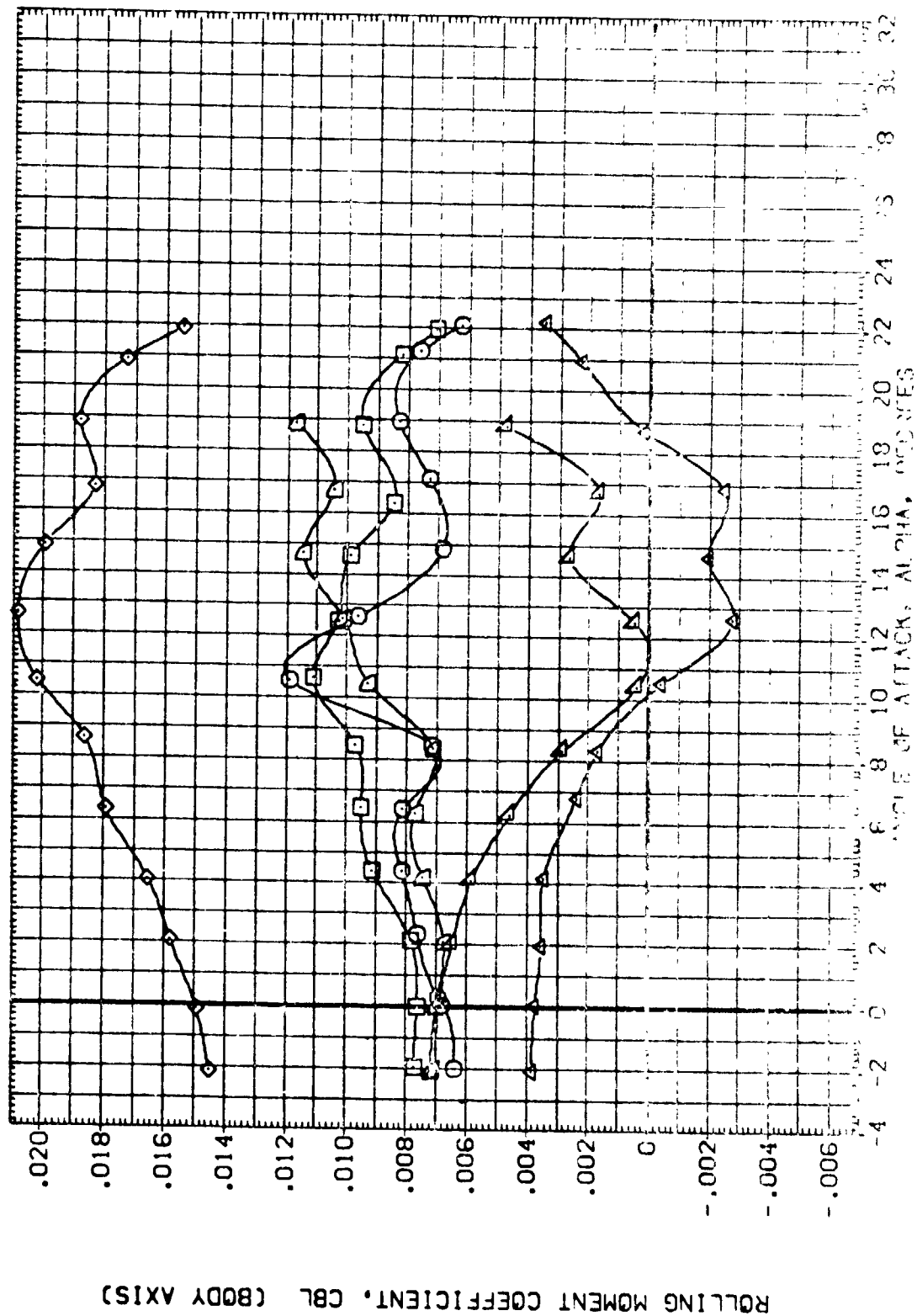


FIGURE 11. OUTBOARD AILERON ROLL CHARACTERISTICS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-LO	ELV-LI	ELV-RI	ELV-RO
(AH1007)	LA-48 8-FT TPT 680 RI-0898/139	5.000	.000	.000	-5.000
(AH1008)	LA-48 8-FT TPT 680 RI-0898/139	5.000	.000	.000	-5.000
(AH1009)	LA-48 8-FT TPT 680 RI-0898/139	10.000	-20.000	-20.000	-10.000
(AH1010)	LA-48 8-FT TPT 680 RI-0898/139	15.000	-20.000	-20.000	-25.000
(AH1011)	LA-48 8-FT TPT 680 RI-0898/139	-10.000	-20.000	-20.000	-30.000
(AH1012)	LA-48 8-FT TPT 680 RI-0898/139	-10.000	-10.000	-10.000	-20.000



LA-48
8-FT TPT

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L6	ELV-L1	ELV-R1	ELV-R6
(A11007)	LA-48 8-FT TPT 320 R1-0698/39	5,000	0.000	0.000	5,000
(A11008)	LA-48 8-FT TPT 680 R1-0698/39	5,000	0.000	0.000	5,000
(A11009)	LA-48 8-FT TPT 680 R1-0698/39	10,000	-20,000	-20,000	10,000
(A11010)	LA-48 8-FT TPT 680 R1-0698/39	-15,000	-20,000	-20,000	-15,000
(A11011)	LA-48 8-FT TPT 680 R1-0698/39	-10,000	-20,000	-20,000	-10,000
(A11012)	LA-48 8-FT TPT 680 R1-0698/39	0.000	-20,000	-20,000	0.000

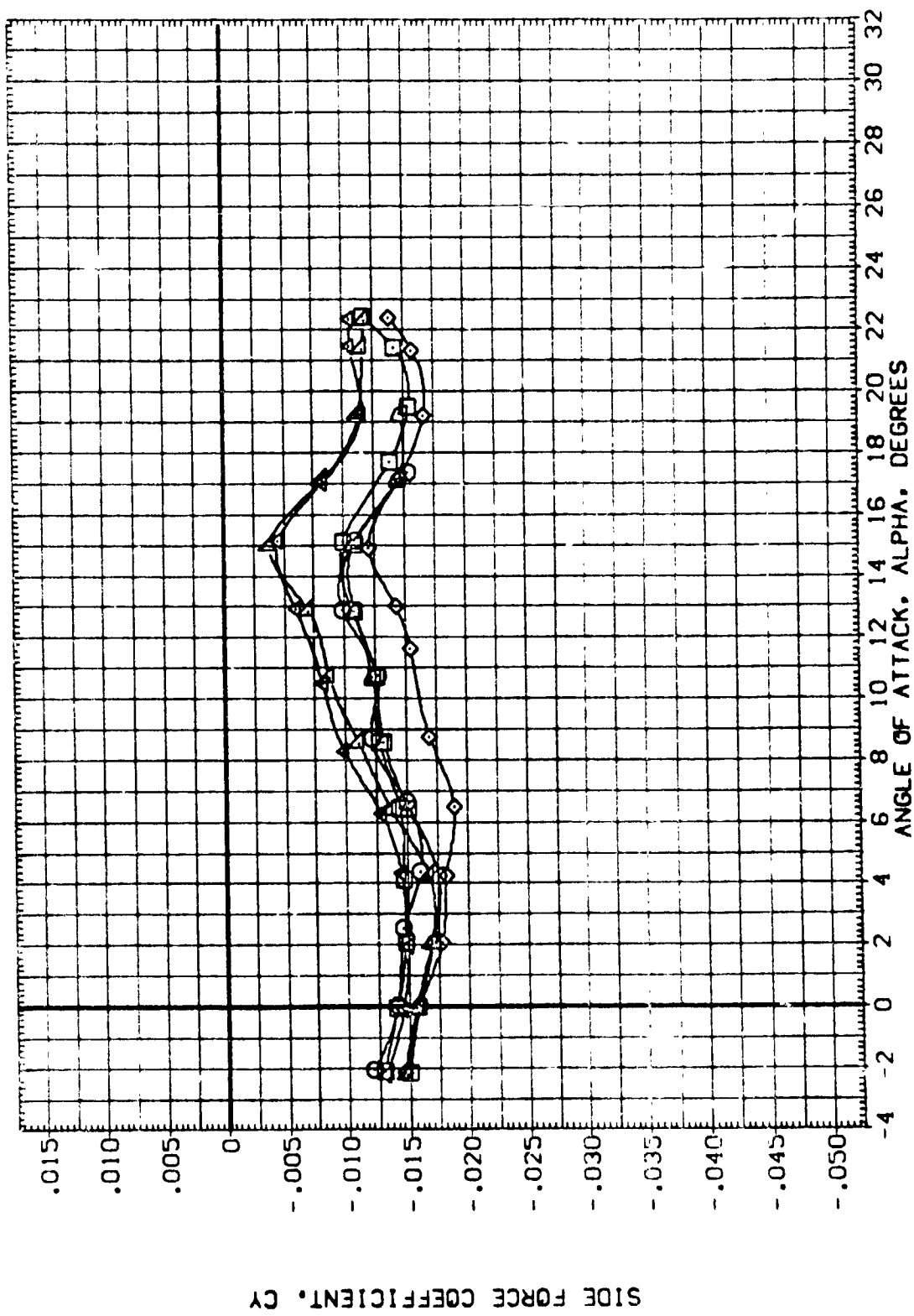
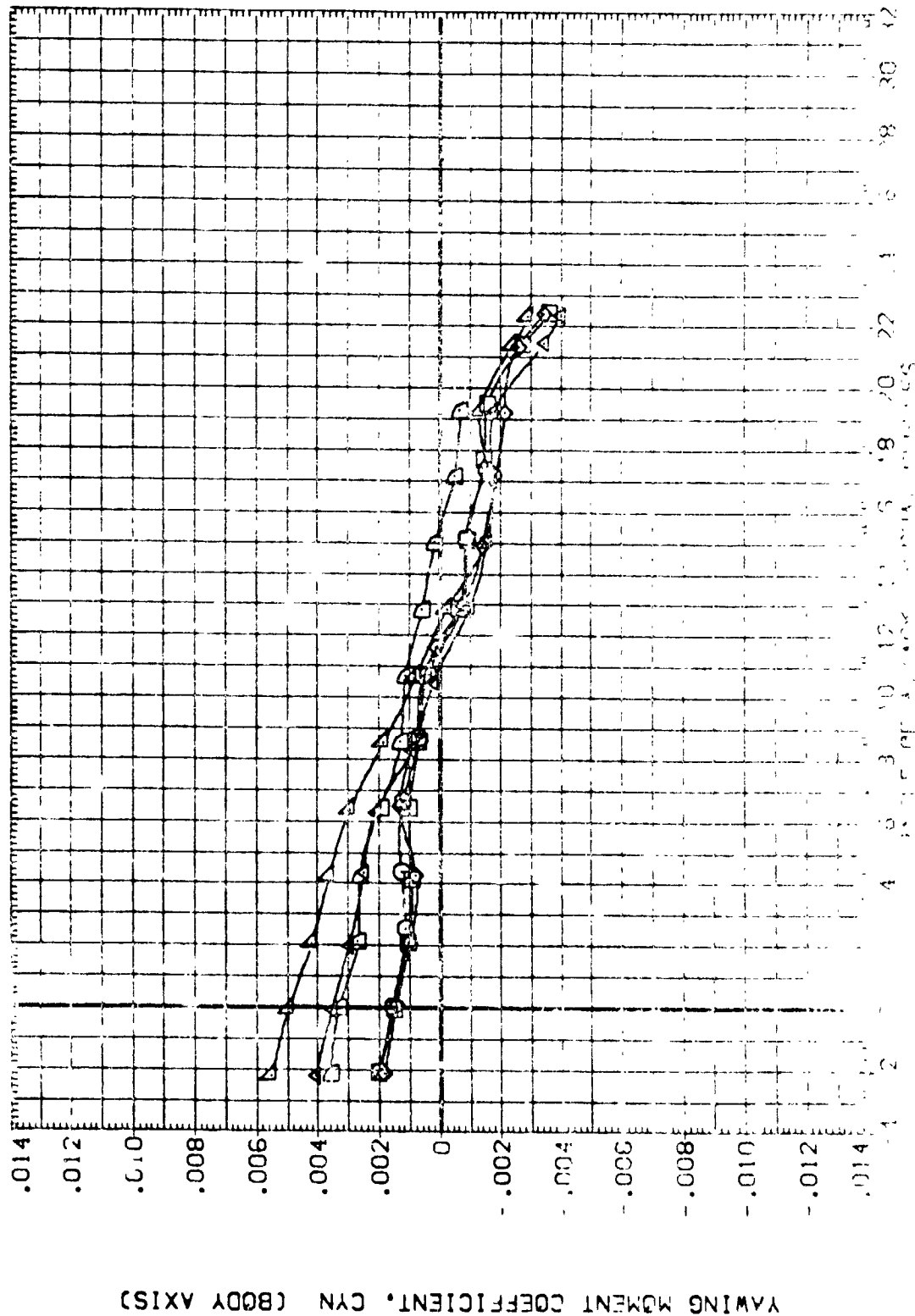


FIGURE 11. OUTBOARD AILERON ROLL CHARACTERISTICS

(8)MACH = .80

DATA SET SYMBOL	CONF	IGURATION	DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0
(AH1007)	LA-48	8-FT	IPT 500 R1-0898/139 018 SPL IT ELEVON	5.000	.000	.000	-5.000
(AH1008)	LA-48	8-FT	IPT 680 R1-0898/139 018 SPL IT ELEVON	5.000	.000	.000	-5.000
(AH1009)	LA-48	8-FT	IPT 860 R1-0898/139 018 SPL IT ELEVON	10.000	.000	.000	-10.000
(AH1010)	LA-48	8-FT	IPT 1040 R1-0898/139 018 SPL IT ELEVON	15.000	.000	.000	-15.000
(AH1011)	LA-48	8-FT	IPT 1220 R1-0898/139 018 SPL IT ELEVON	20.000	.000	.000	-20.000
(AH1012)	LA-48	8-FT	IPT 1400 R1-0898/139 018 SPL IT ELEVON	25.000	.000	.000	-25.000



DATA SET SYMBOLS: 1-48 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-49 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-50 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-51 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-52 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-53 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-54 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-55 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-56 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-57 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-58 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-59 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-60 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-61 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-62 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-63 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-64 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-65 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-66 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-67 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-68 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-69 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-70 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-71 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-72 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-73 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-74 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-75 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-76 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-77 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-78 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-79 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-80 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-81 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-82 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-83 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-84 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
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 1-86 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-87 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-88 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-89 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-90 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
 1-91 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON
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 1-100 3-ET 15 580 R1-0858/ 39 088 SPLIT ELEVON

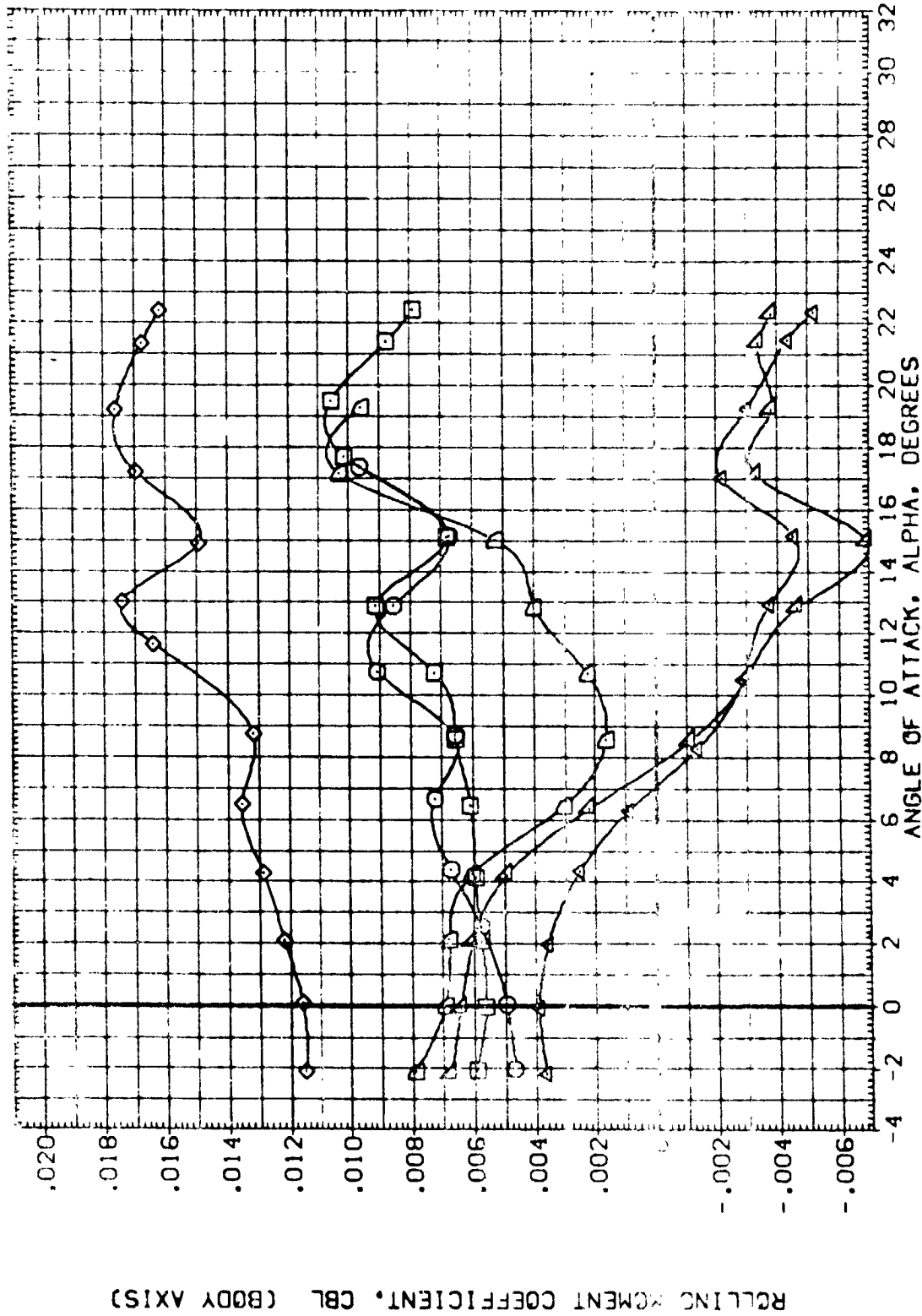


FIGURE 11. OUTBOARD AILERON ROLL CHARACTERISTICS

(B)MACH = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	REF
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1-19	1-19	1-19
1-20	1-20	1-20
1-21	1-21	1-21
1-22	1-22	1-22
1-23	1-23	1-23
1-24	1-24	1-24
1-25	1-25	1-25
1-26	1-26	1-26
1-27	1-27	1-27
1-28	1-28	1-28
1-29	1-29	1-29
1-30	1-30	1-30
1-31	1-31	1-31
1-32	1-32	1-32
1-33	1-33	1-33
1-34	1-34	1-34
1-35	1-35	1-35
1-36	1-36	1-36
1-37	1-37	1-37
1-38	1-38	1-38
1-39	1-39	1-39
1-40	1-40	1-40
1-41	1-41	1-41
1-42	1-42	1-42
1-43	1-43	1-43
1-44	1-44	1-44
1-45	1-45	1-45
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1-73	1-73	1-73
1-74	1-74	1-74
1-75	1-75	1-75
1-76	1-76	1-76
1-77	1-77	1-77
1-78	1-78	1-78
1-79	1-79	1-79
1-80	1-80	1-80
1-81	1-81	1-81
1-82	1-82	1-82
1-83	1-83	1-83
1-84	1-84	1-84
1-85	1-85	1-85
1-86	1-86	1-86
1-87	1-87	1-87
1-88	1-88	1-88
1-89	1-89	1-89
1-90	1-90	1-90
1-91	1-91	1-91
1-92	1-92	1-92
1-93	1-93	1-93
1-94	1-94	1-94
1-95	1-95	1-95
1-96	1-96	1-96
1-97	1-97	1-97
1-98	1-98	1-98
1-99	1-99	1-99
1-100	1-100	1-100

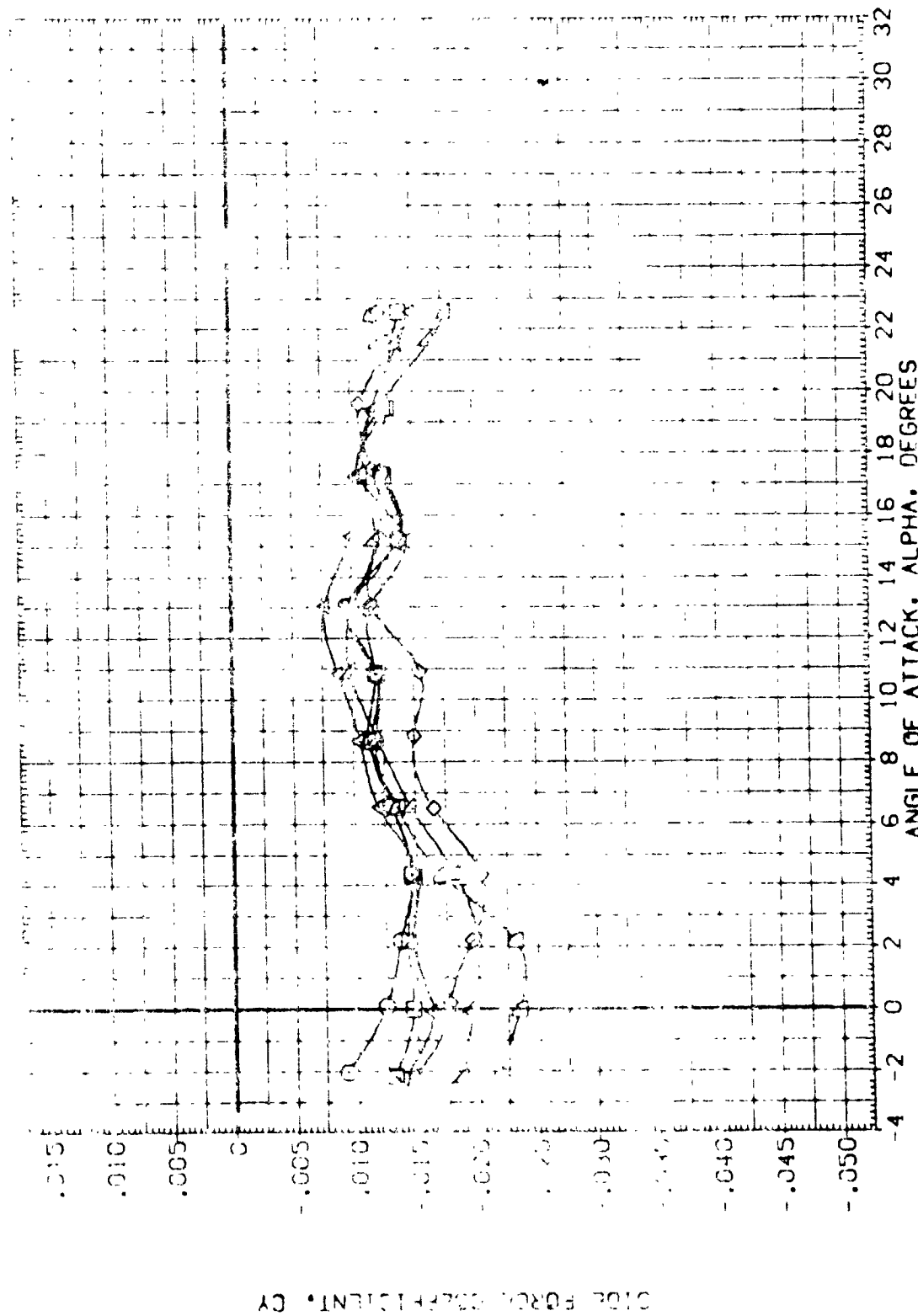


FIGURE 11. OUTBOARD AILERON ROLL CHARACTERISTICS

(O)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0
(A1007)	LA-48 8-FT TPT 580 R1-0038/138 498 SPT IT ELEVON	5.000	0.000	0.000	-5.000
(A1008)	LA-48 8-FT TPT 580 R1-0038/138 498 SPT IT ELEVON	5.000	0.000	0.000	-5.000
(A1009)	LA-48 8-FT TPT 580 R1-0038/138 498 SPT IT ELEVON	5.000	0.000	0.000	-5.000
(A1010)	LA-48 8-FT TPT 580 R1-0038/138 498 SPT IT ELEVON	5.000	0.000	0.000	-5.000
(A1011)	LA-48 8-FT TPT 580 R1-0038/138 498 SPT IT ELEVON	5.000	0.000	0.000	-5.000
(A1012)	LA-48 8-FT TPT 580 R1-0038/138 498 SPT IT ELEVON	5.000	0.000	0.000	-5.000

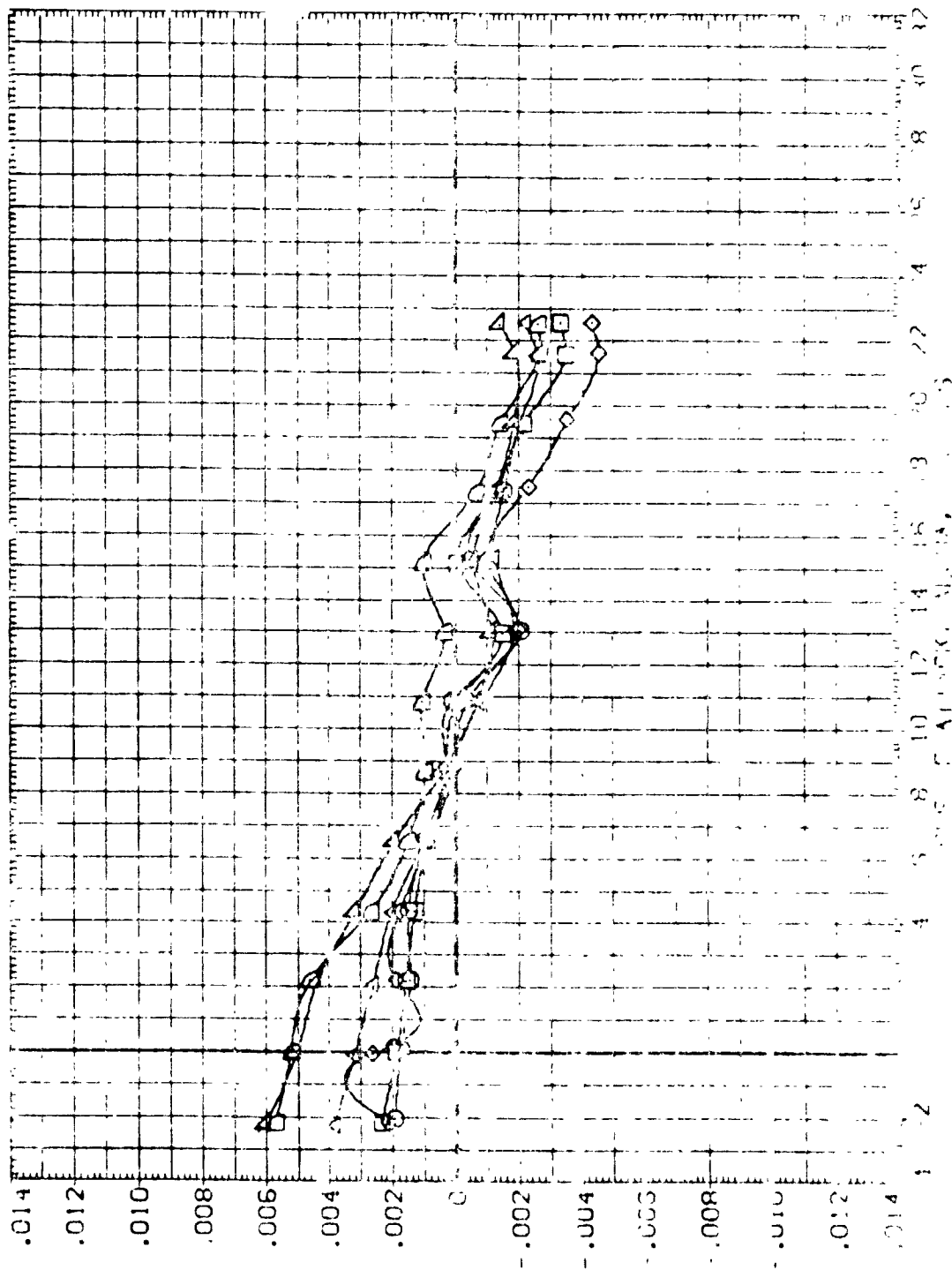


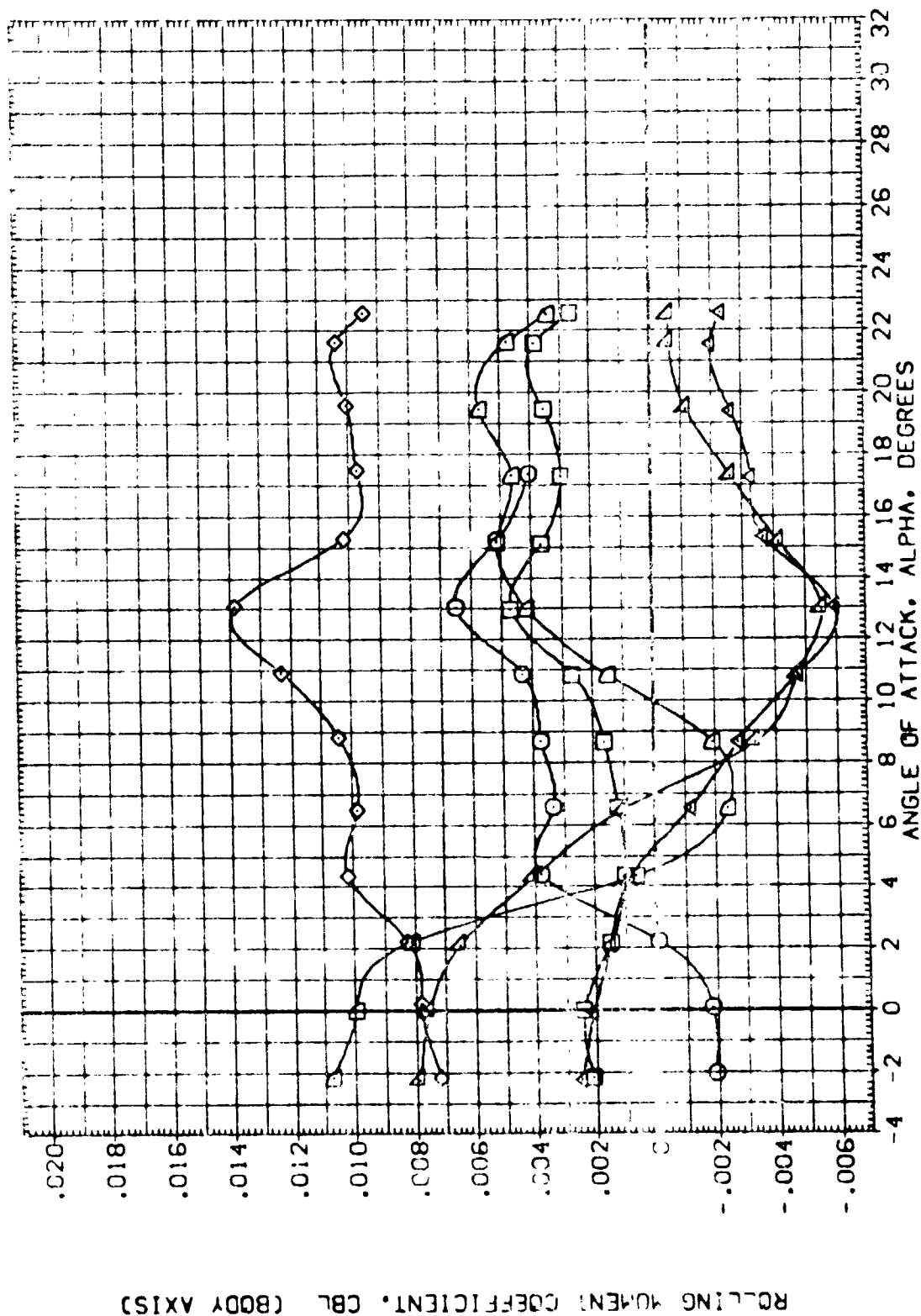
FIGURE 11. YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

DATA SET 5000
 (007)
 (008)
 (009)
 (010)
 (011)
 (012)

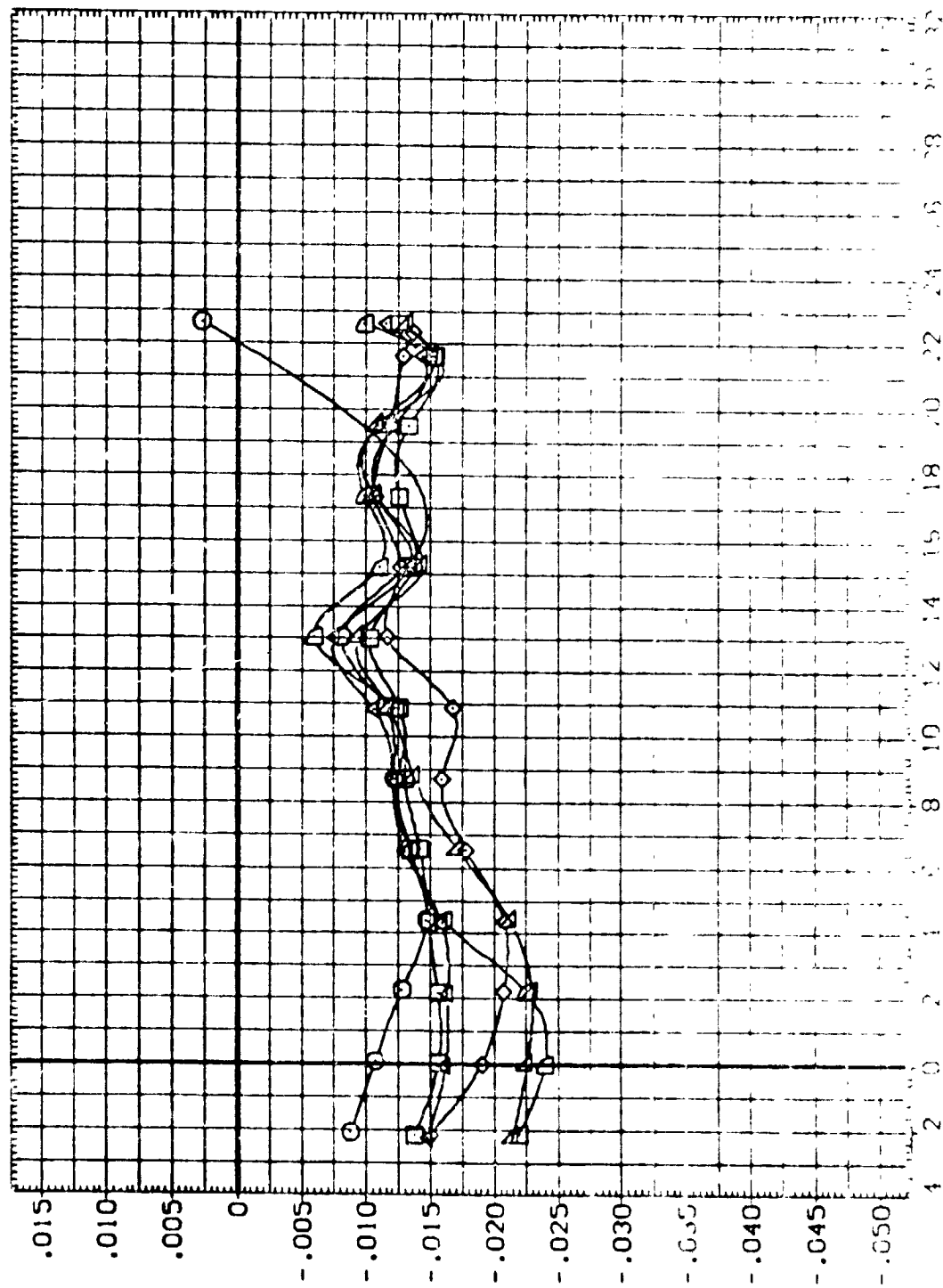
CONFIGURATION DESCRIPTION
 A-46 8-ET PT 800 RI-0898/38
 A-46 8-ET PT 800 RI-0898/38
 A-46 8-ET PT 800 RI-0898/38
 A-46 8-ET PT 800 RI-0898/38
 A-46 8-ET PT 800 RI-0898/38

SPAL IT ELEVON
 SPAL IT ELEVON
 SPAL IT ELEVON
 SPAL IT ELEVON
 SPAL IT ELEVON

ELEV-0 ELEV-1 ELEV-2 ELEV-RC
 0.000 0.000 0.000 0.000
 0.000 0.000 0.000 0.000
 0.000 0.000 0.000 0.000
 0.000 0.000 0.000 0.000
 0.000 0.000 0.000 0.000



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-LB	ELV-LI	ELV-RI	ELV-RB
(A1007)	LA-48 8-FT TPT 680 RI-0898/39	5.000	.000	.000	-5.000
(A1008)	LA-48 8-FT TPT 680 RI-0898/39	5.000	-20.000	-20.000	-5.000
(A1009)	LA-48 8-FT TPT 680 RI-0898/39	10.000	-20.000	-20.000	-10.000
(A1010)	LA-48 8-FT TPT 680 RI-0898/39	-15.000	-20.000	-20.000	-25.000
(A1011)	LA-48 8-FT TPT 680 RI-0898/39	-10.000	-20.000	-20.000	-30.000
(A1012)	LA-48 8-FT TPT 680 RI-0898/39	.000	-10.000	-10.000	-20.000



SIDE FORCE COEFFICIENT, C_y

ANGLE OF ATTACK, α

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION
[A1007]	A-18 8-FT IPT 680 R1 -0898/39	098 5A 17 ELEVON
[A1008]	A-18 8-FT IPT 680 R1 -0898/39	098 5A 17 ELEVON
[A1009]	A-18 8-FT IPT 680 R1 -0898/39	098 5A 17 ELEVON
[A1010]	A-18 8-FT IPT 680 R1 -0898/39	098 5A 17 ELEVON
[A1011]	A-18 8-FT IPT 680 R1 -0898/39	098 5A 17 ELEVON
[A1012]	A-18 8-FT IPT 680 R1 -0898/39	098 5A 17 ELEVON

ELV-LS ELV-RT ELV-RO
 5.000 5.000 5.000
 10.000 10.000 10.000
 15.000 15.000 15.000
 20.000 20.000 20.000
 25.000 25.000 25.000
 30.000 30.000 30.000

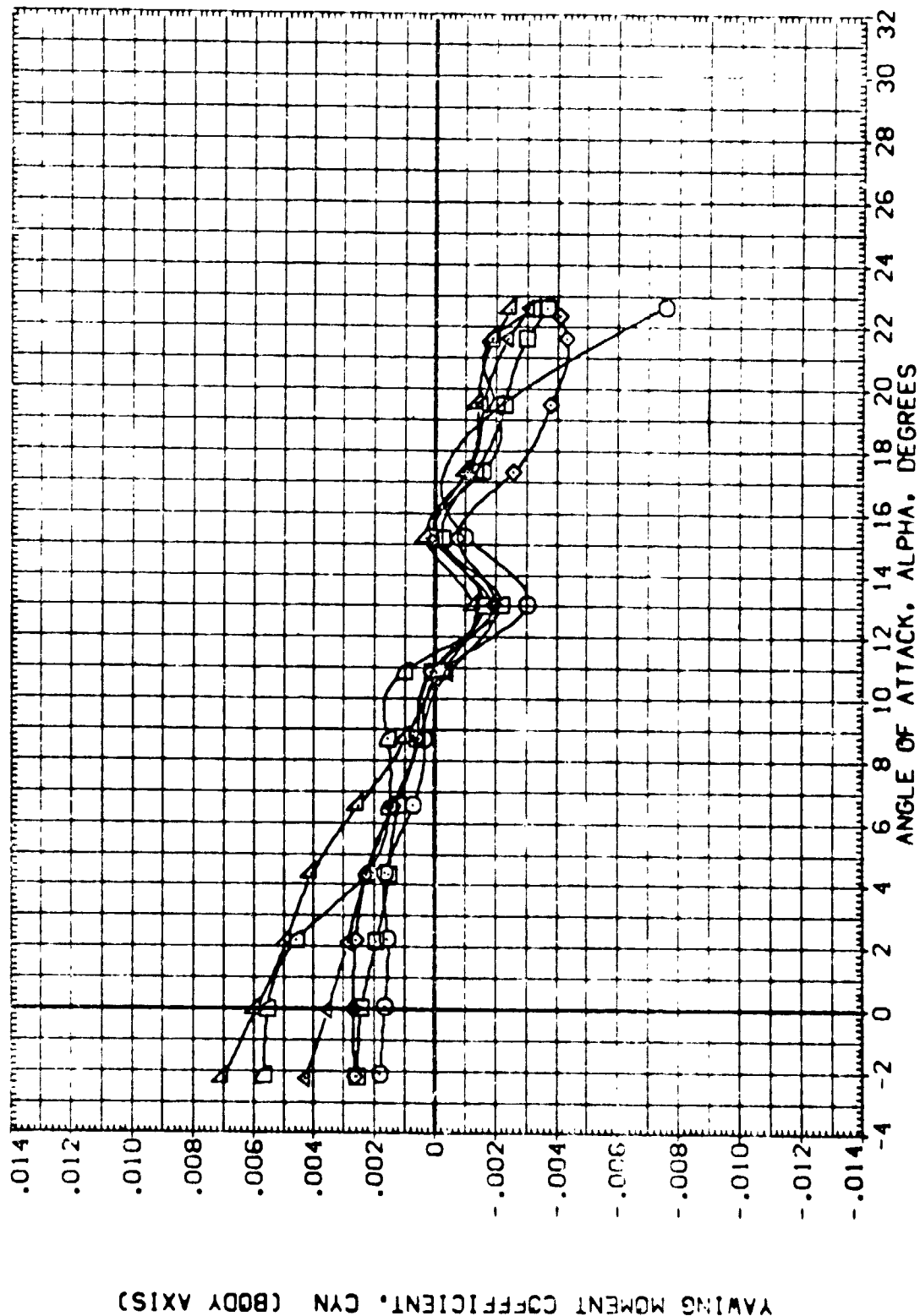
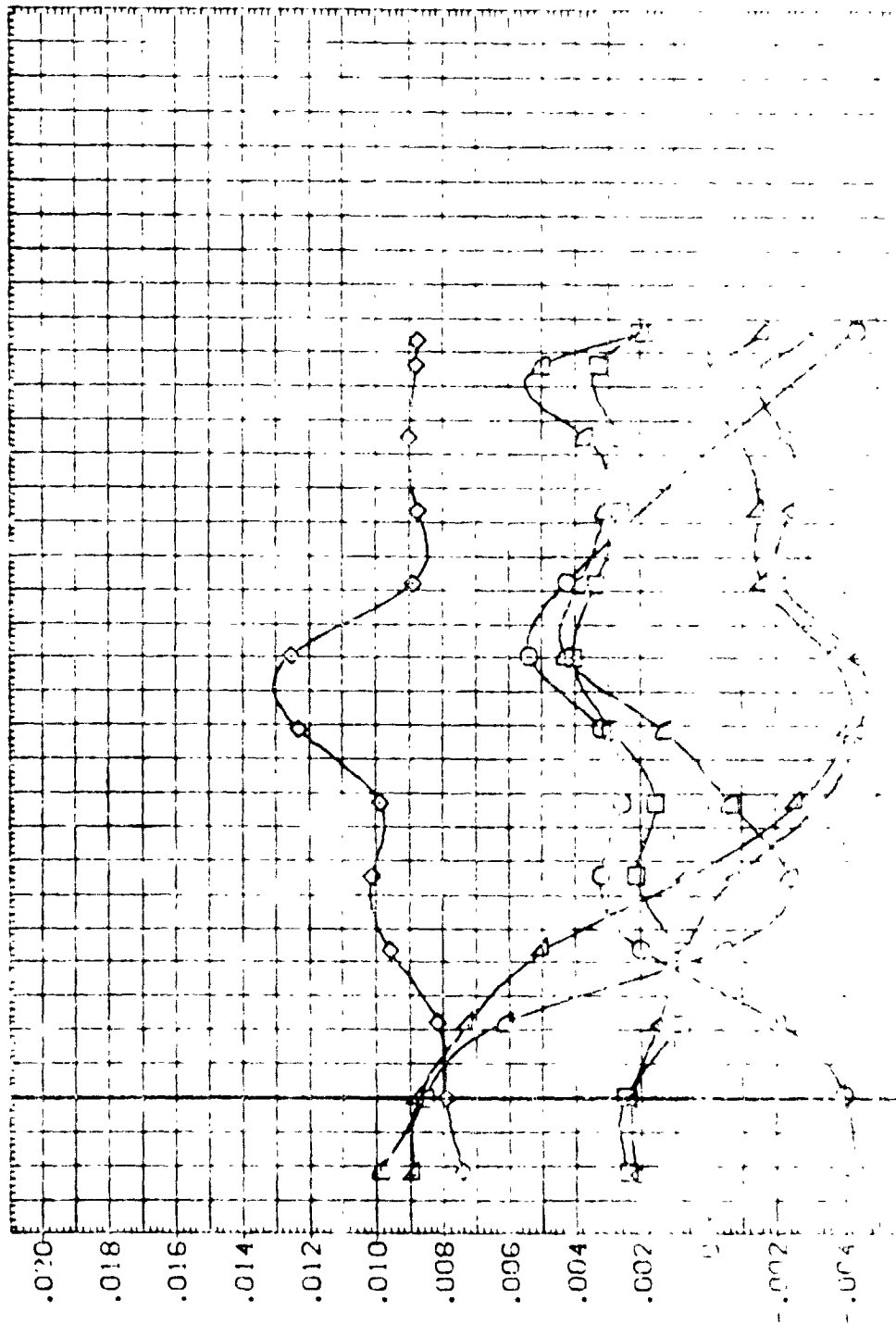


FIGURE 11. OUTBOARD AILERON ROLL CHARACTERISTICS

(C)MACH = .92

DATA SET	SYMBOL	LINE	LOCATION	DESCRIPTION	ELV-LO	ELV-LI	ELV-RI	ELV-RO
LA-007	○	1	PT 630 R	0883/139	5.000	.000	.000	-5.000
LA-008	○	2	PT 630 R	0883/139	5.000	-20.000	-20.000	-5.000
LA-009	○	3	PT 630 R	0883/139	10.000	-20.000	-20.000	-10.000
LA-010	○	4	PT 630 R	0883/139	-15.000	-20.000	-20.000	-25.000
LA-011	○	5	PT 630 R	0883/139	-10.000	-20.000	-20.000	-30.000
LA-012	○	6	PT 630 R	0883/139	-10.000	-10.000	-10.000	-20.000



DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION
01007	01 00 00	01 00 00
01008	01 00 00	01 00 00
01009	01 00 00	01 00 00
01010	01 00 00	01 00 00
01011	01 00 00	01 00 00
01012	01 00 00	01 00 00
01013	01 00 00	01 00 00
01014	01 00 00	01 00 00
01015	01 00 00	01 00 00
01016	01 00 00	01 00 00
01017	01 00 00	01 00 00
01018	01 00 00	01 00 00
01019	01 00 00	01 00 00
01020	01 00 00	01 00 00
01021	01 00 00	01 00 00
01022	01 00 00	01 00 00
01023	01 00 00	01 00 00
01024	01 00 00	01 00 00
01025	01 00 00	01 00 00
01026	01 00 00	01 00 00
01027	01 00 00	01 00 00
01028	01 00 00	01 00 00
01029	01 00 00	01 00 00
01030	01 00 00	01 00 00
01031	01 00 00	01 00 00
01032	01 00 00	01 00 00
01033	01 00 00	01 00 00
01034	01 00 00	01 00 00
01035	01 00 00	01 00 00
01036	01 00 00	01 00 00
01037	01 00 00	01 00 00
01038	01 00 00	01 00 00
01039	01 00 00	01 00 00
01040	01 00 00	01 00 00
01041	01 00 00	01 00 00
01042	01 00 00	01 00 00
01043	01 00 00	01 00 00
01044	01 00 00	01 00 00
01045	01 00 00	01 00 00
01046	01 00 00	01 00 00
01047	01 00 00	01 00 00
01048	01 00 00	01 00 00
01049	01 00 00	01 00 00
01050	01 00 00	01 00 00
01051	01 00 00	01 00 00
01052	01 00 00	01 00 00
01053	01 00 00	01 00 00
01054	01 00 00	01 00 00
01055	01 00 00	01 00 00
01056	01 00 00	01 00 00
01057	01 00 00	01 00 00
01058	01 00 00	01 00 00
01059	01 00 00	01 00 00
01060	01 00 00	01 00 00
01061	01 00 00	01 00 00
01062	01 00 00	01 00 00
01063	01 00 00	01 00 00
01064	01 00 00	01 00 00
01065	01 00 00	01 00 00
01066	01 00 00	01 00 00
01067	01 00 00	01 00 00
01068	01 00 00	01 00 00
01069	01 00 00	01 00 00
01070	01 00 00	01 00 00
01071	01 00 00	01 00 00
01072	01 00 00	01 00 00
01073	01 00 00	01 00 00
01074	01 00 00	01 00 00
01075	01 00 00	01 00 00
01076	01 00 00	01 00 00
01077	01 00 00	01 00 00
01078	01 00 00	01 00 00
01079	01 00 00	01 00 00
01080	01 00 00	01 00 00
01081	01 00 00	01 00 00
01082	01 00 00	01 00 00
01083	01 00 00	01 00 00
01084	01 00 00	01 00 00
01085	01 00 00	01 00 00
01086	01 00 00	01 00 00
01087	01 00 00	01 00 00
01088	01 00 00	01 00 00
01089	01 00 00	01 00 00
01090	01 00 00	01 00 00
01091	01 00 00	01 00 00
01092	01 00 00	01 00 00
01093	01 00 00	01 00 00
01094	01 00 00	01 00 00
01095	01 00 00	01 00 00
01096	01 00 00	01 00 00
01097	01 00 00	01 00 00
01098	01 00 00	01 00 00
01099	01 00 00	01 00 00
01100	01 00 00	01 00 00

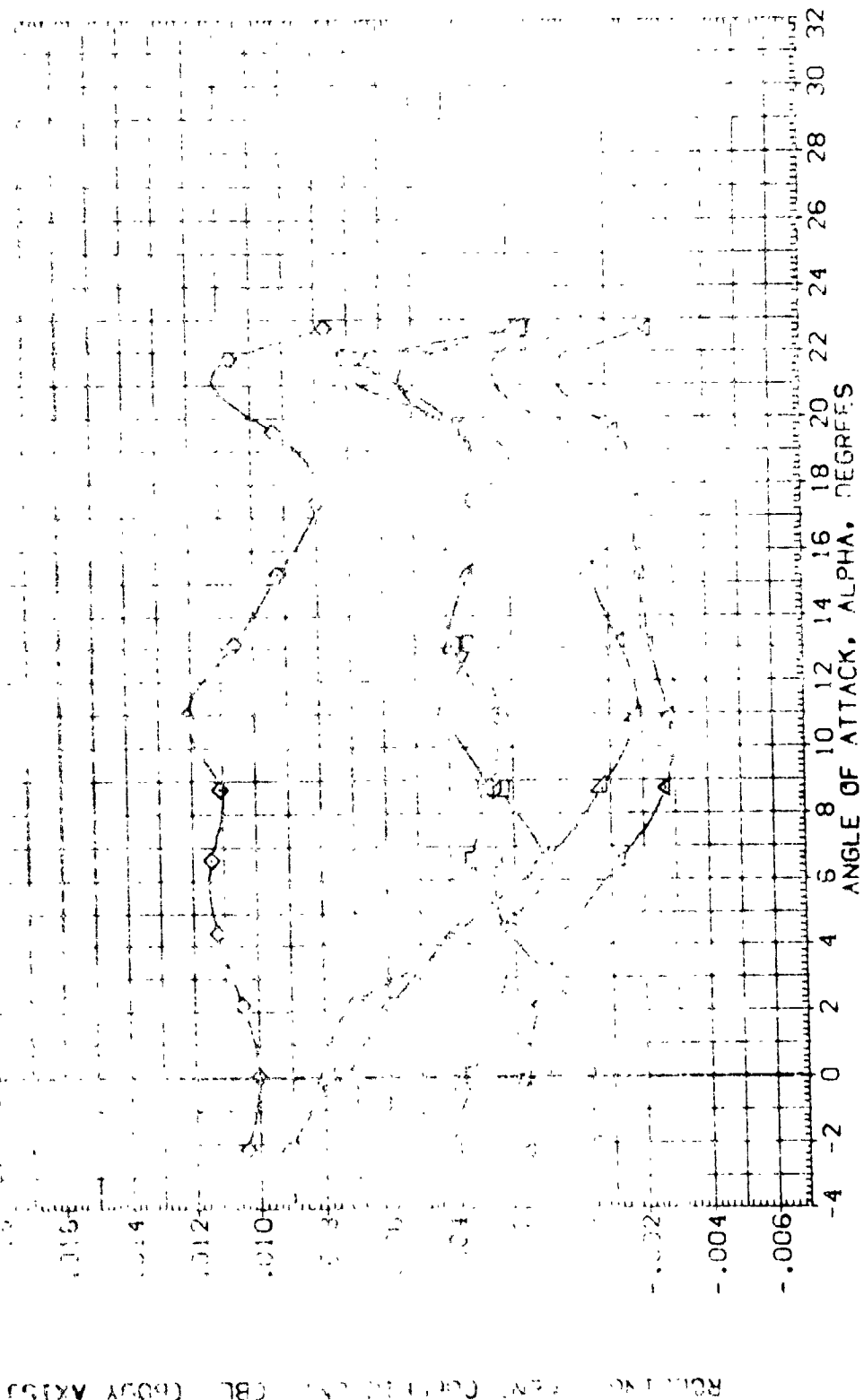
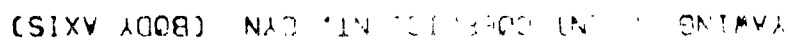


FIGURE 11. OUTBOARD AILERON ROLL CHARACTERISTICS

(F)MACH = .95

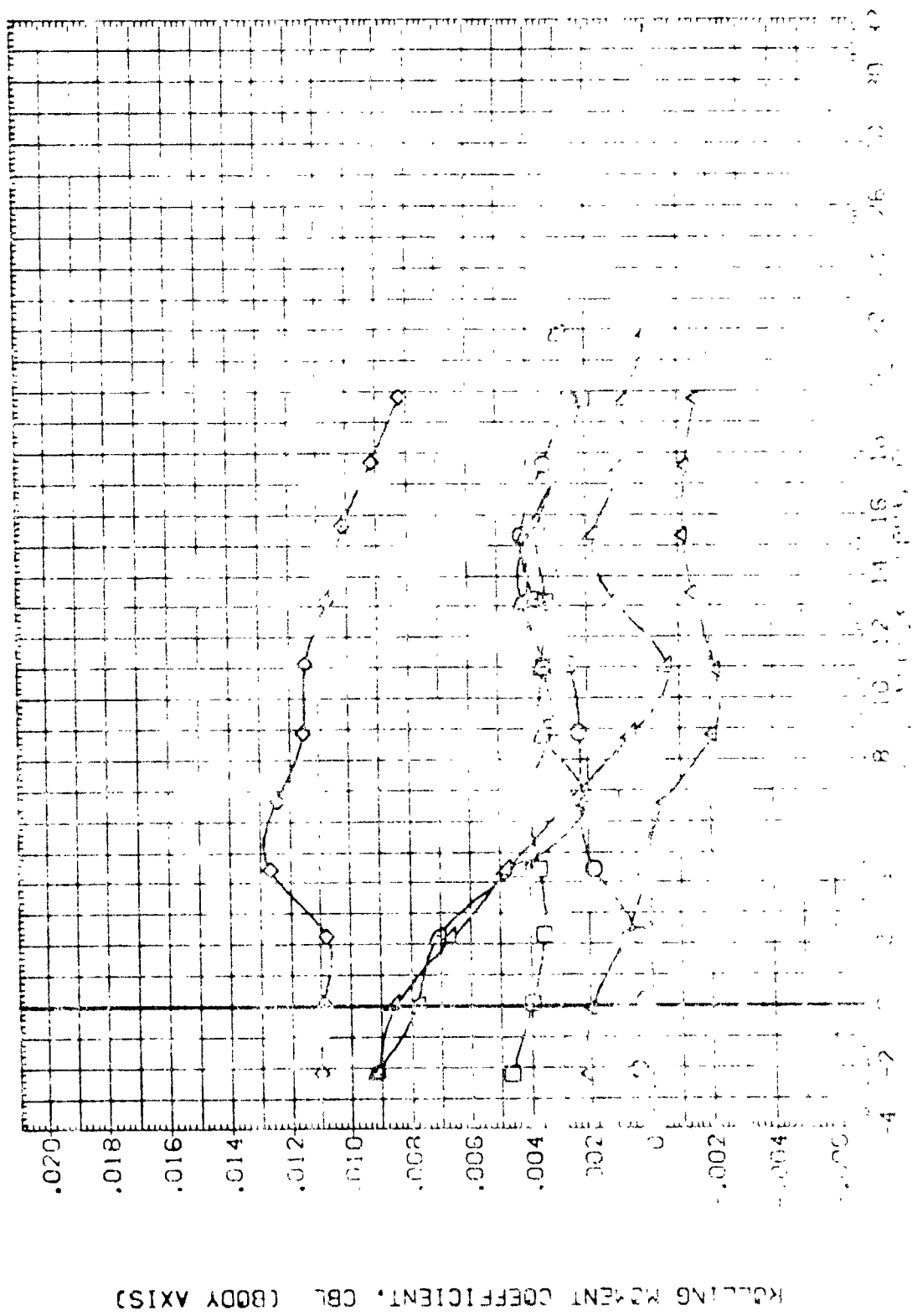
365-65
 365-65
 365-65
 365-65
 365-65



{G}MACH = .98



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0
[A11007]	LA-48 8-FT TPT 680 R1 -0693/23 003 SPLIT ELEVON	5.000	.000	.000	-5.000
[A11008]	LA-48 8-FT TPT 680 R1 -0693/23 003 SPLIT ELEVON	5.000	-20.000	-20.000	-5.000
[A11009]	LA-48 8-FT TPT 680 R1 -0693/23 003 SPLIT ELEVON	10.000	-20.000	-20.000	-10.000
[A11010]	LA-48 8-FT TPT 680 R1 -0693/23 003 SPLIT ELEVON	-15.000	-20.000	-20.000	-25.000
[A11011]	LA-48 8-FT TPT 680 R1 -0693/23 003 SPLIT ELEVON	-10.000	-20.000	-20.000	-30.000
[A11012]	LA-48 8-FT TPT 680 R1 -0693/23 003 SPLIT ELEVON	.000	-10.000	-10.000	-20.000



LA-48 8-FT TPT 680 R1 -0693/23 003 SPLIT ELEVON

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION	UNIT
1-1	1-1	1-1	1-1
1-2	1-2	1-2	1-2
1-3	1-3	1-3	1-3
1-4	1-4	1-4	1-4
1-5	1-5	1-5	1-5
1-6	1-6	1-6	1-6
1-7	1-7	1-7	1-7
1-8	1-8	1-8	1-8
1-9	1-9	1-9	1-9
1-10	1-10	1-10	1-10
1-11	1-11	1-11	1-11
1-12	1-12	1-12	1-12
1-13	1-13	1-13	1-13
1-14	1-14	1-14	1-14
1-15	1-15	1-15	1-15
1-16	1-16	1-16	1-16
1-17	1-17	1-17	1-17
1-18	1-18	1-18	1-18
1-19	1-19	1-19	1-19
1-20	1-20	1-20	1-20
1-21	1-21	1-21	1-21
1-22	1-22	1-22	1-22
1-23	1-23	1-23	1-23
1-24	1-24	1-24	1-24
1-25	1-25	1-25	1-25
1-26	1-26	1-26	1-26
1-27	1-27	1-27	1-27
1-28	1-28	1-28	1-28
1-29	1-29	1-29	1-29
1-30	1-30	1-30	1-30
1-31	1-31	1-31	1-31
1-32	1-32	1-32	1-32
1-33	1-33	1-33	1-33
1-34	1-34	1-34	1-34
1-35	1-35	1-35	1-35
1-36	1-36	1-36	1-36
1-37	1-37	1-37	1-37
1-38	1-38	1-38	1-38
1-39	1-39	1-39	1-39
1-40	1-40	1-40	1-40
1-41	1-41	1-41	1-41
1-42	1-42	1-42	1-42
1-43	1-43	1-43	1-43
1-44	1-44	1-44	1-44
1-45	1-45	1-45	1-45
1-46	1-46	1-46	1-46
1-47	1-47	1-47	1-47
1-48	1-48	1-48	1-48
1-49	1-49	1-49	1-49
1-50	1-50	1-50	1-50
1-51	1-51	1-51	1-51
1-52	1-52	1-52	1-52
1-53	1-53	1-53	1-53
1-54	1-54	1-54	1-54
1-55	1-55	1-55	1-55
1-56	1-56	1-56	1-56
1-57	1-57	1-57	1-57
1-58	1-58	1-58	1-58
1-59	1-59	1-59	1-59
1-60	1-60	1-60	1-60
1-61	1-61	1-61	1-61
1-62	1-62	1-62	1-62
1-63	1-63	1-63	1-63
1-64	1-64	1-64	1-64
1-65	1-65	1-65	1-65
1-66	1-66	1-66	1-66
1-67	1-67	1-67	1-67
1-68	1-68	1-68	1-68
1-69	1-69	1-69	1-69
1-70	1-70	1-70	1-70
1-71	1-71	1-71	1-71
1-72	1-72	1-72	1-72
1-73	1-73	1-73	1-73
1-74	1-74	1-74	1-74
1-75	1-75	1-75	1-75
1-76	1-76	1-76	1-76
1-77	1-77	1-77	1-77
1-78	1-78	1-78	1-78
1-79	1-79	1-79	1-79
1-80	1-80	1-80	1-80
1-81	1-81	1-81	1-81
1-82	1-82	1-82	1-82
1-83	1-83	1-83	1-83
1-84	1-84	1-84	1-84
1-85	1-85	1-85	1-85
1-86	1-86	1-86	1-86
1-87	1-87	1-87	1

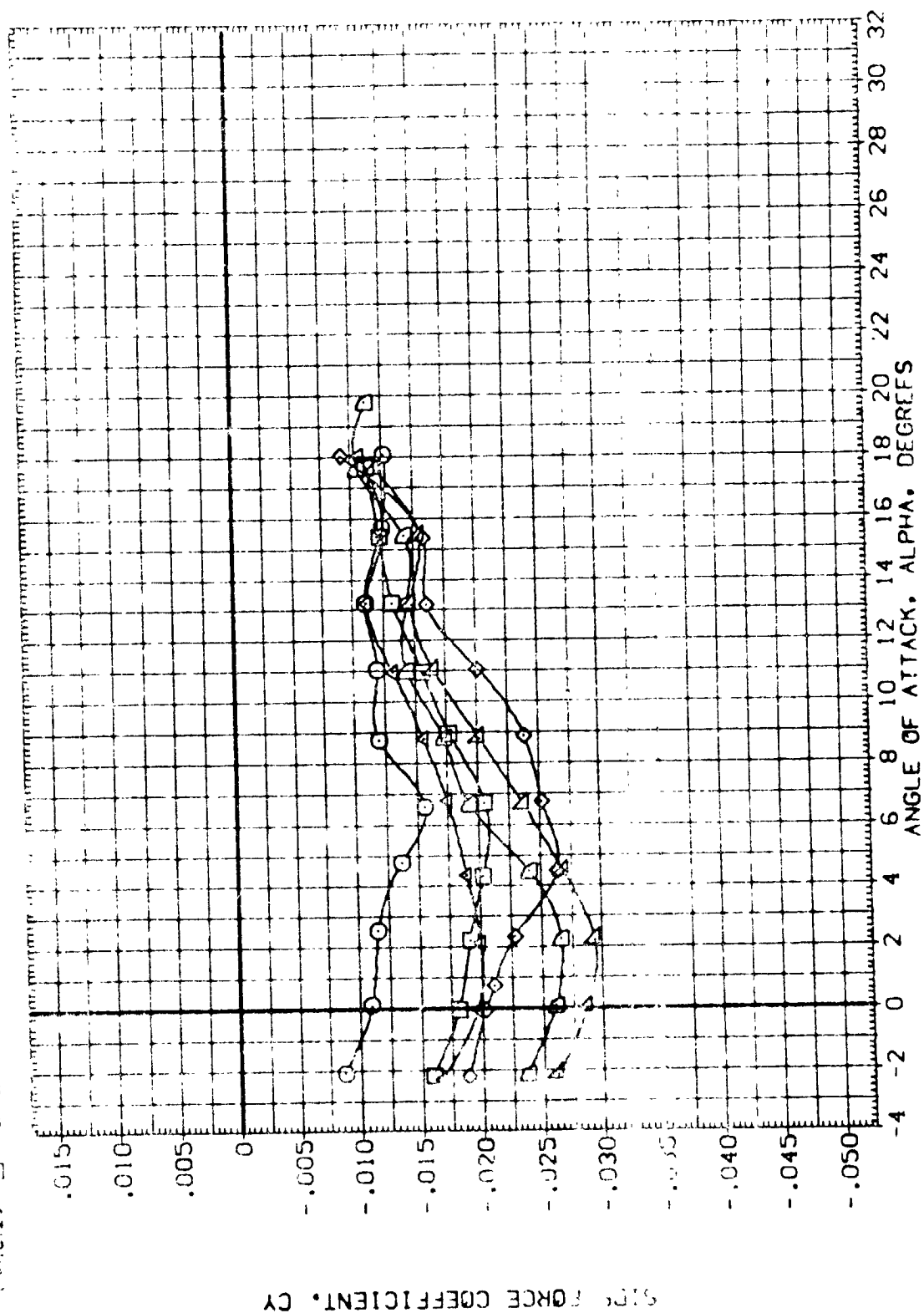
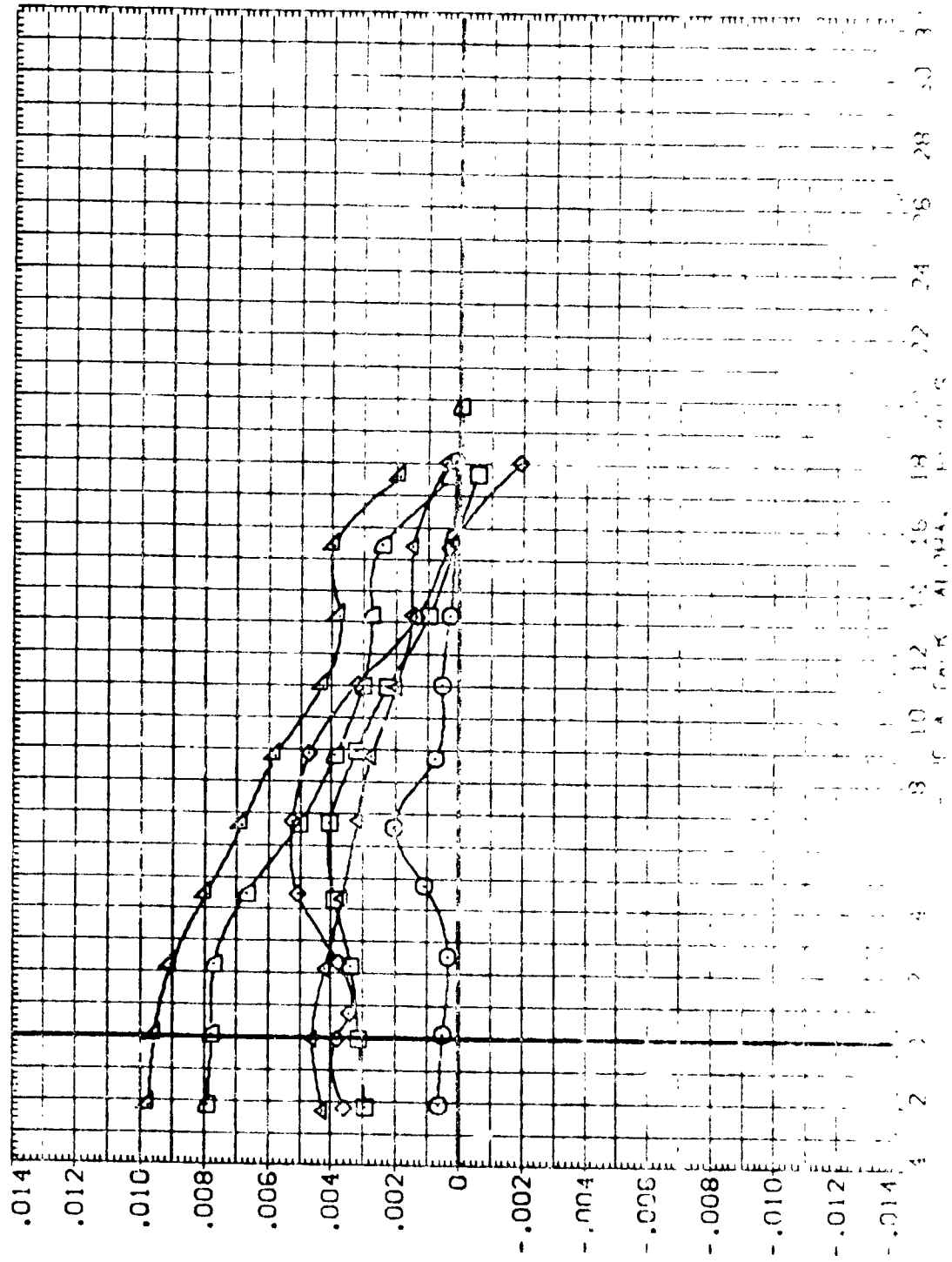


FIGURE 11. OUTBOARD AILERON ROLL CHARACTERISTICS
(H)MACH = 1.08

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0
[A1]007	LA-48 8-FT TPT 680 RI-0833/139 348 SPL IT ELEVON	5.000	.000	.000	-5.000
[A1]008	LA-48 8-FT TPT 680 RI-0833/139 348 SPL IT ELEVON	5.000	-20.000	-20.000	-5.000
[A1]009	LA-48 8-FT TPT 680 RI-0833/139 348 SPL IT ELEVON	10.000	-20.000	-20.000	-10.000
[A1]010	LA-48 8-FT TPT 680 RI-0833/139 348 SPL IT ELEVON	-15.000	-20.000	-20.000	-25.000
[A1]011	LA-48 8-FT TPT 680 RI-0833/139 348 SPL IT ELEVON	-10.000	-20.000	-20.000	-30.000
[A1]012	LA-48 8-FT TPT 680 RI-0833/139 348 SPL IT ELEVON	.000	-10.000	-10.000	-20.000



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (A1)007 LA-48 8-FT TPT 680 RI-0898/39 098 5AL IT ELEVON
 (A1)008 LA-48 8-FT TPT 680 RI-0898/39 098 5AL IT ELEVON
 (A1)009 LA-48 8-FT TPT 680 RI-0898/39 098 5AL IT ELEVON
 (A1)010 LA-48 8-FT TPT 680 RI-0898/39 098 5AL IT ELEVON
 (A1)011 LA-48 8-FT TPT 680 RI-0898/39 098 5AL IT ELEVON
 (A1)012 LA-48 8-FT TPT 680 RI-0898/39 098 5AL IT ELEVON

ELEV-8 ELEV-11 ELEV-RI ELEV-RO
 5.000 5.000 30.000 30.000
 5.000 5.000 30.000 30.000
 5.000 5.000 30.000 30.000
 5.000 5.000 30.000 30.000
 5.000 5.000 30.000 30.000
 5.000 5.000 30.000 30.000

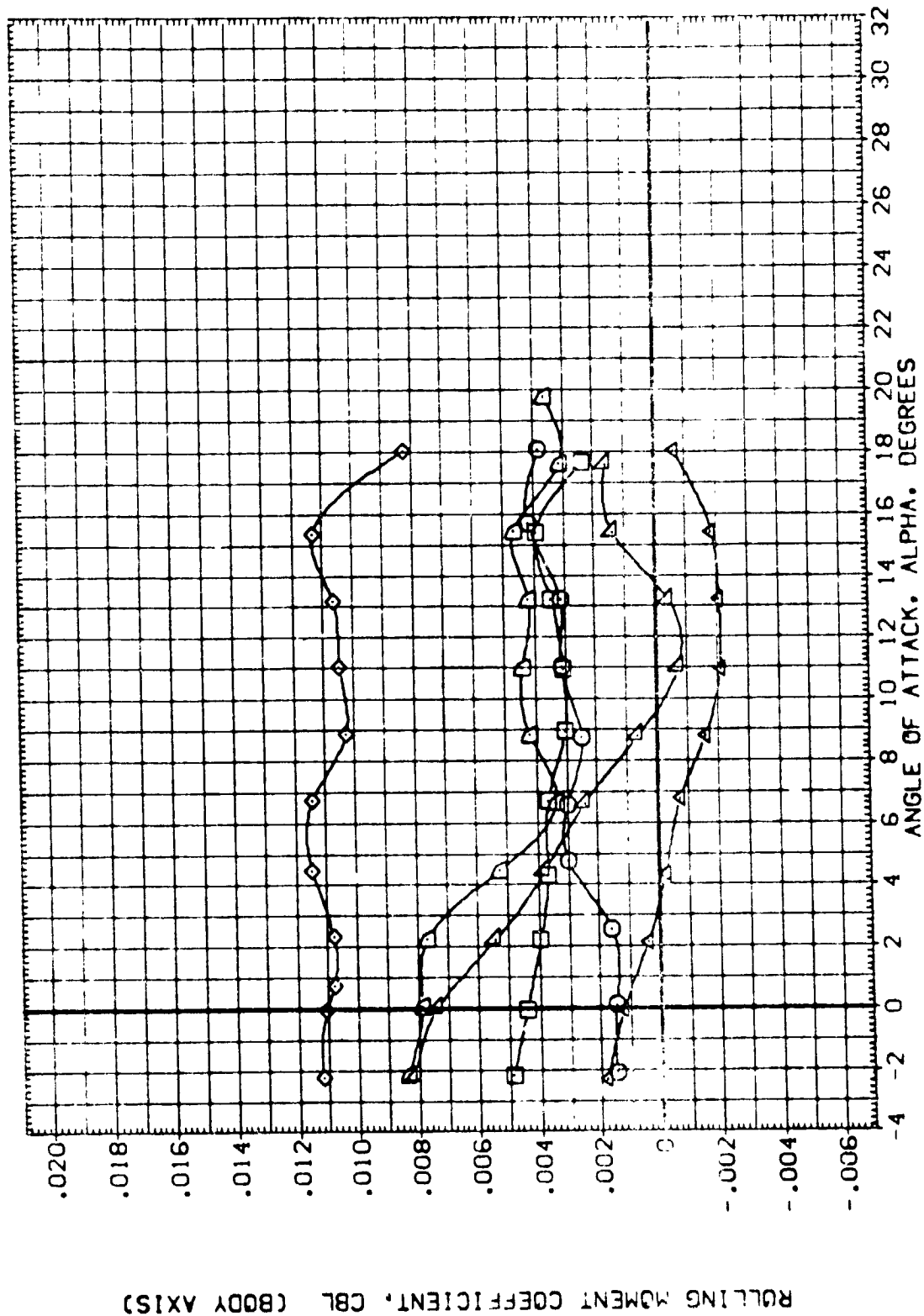
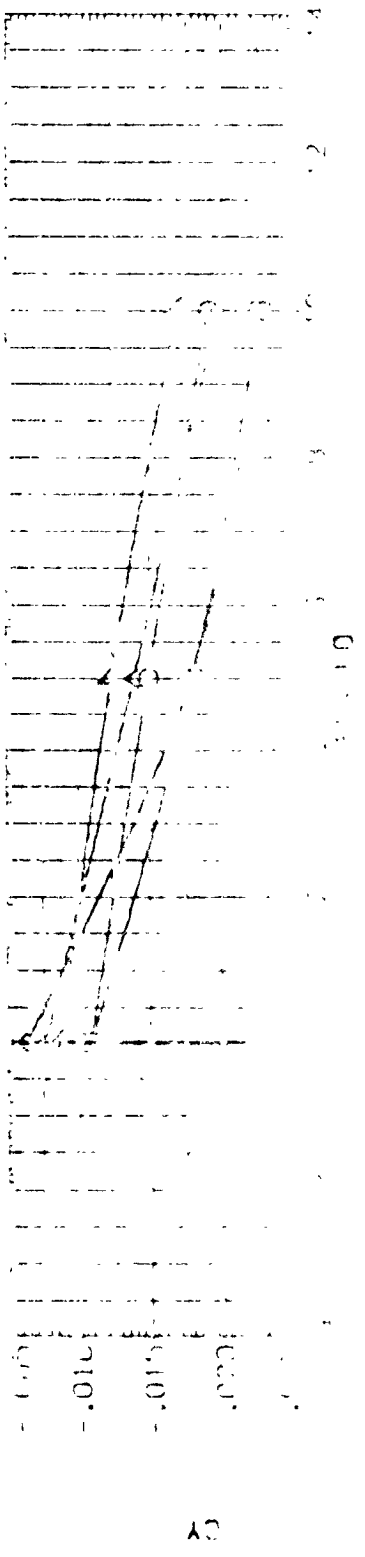
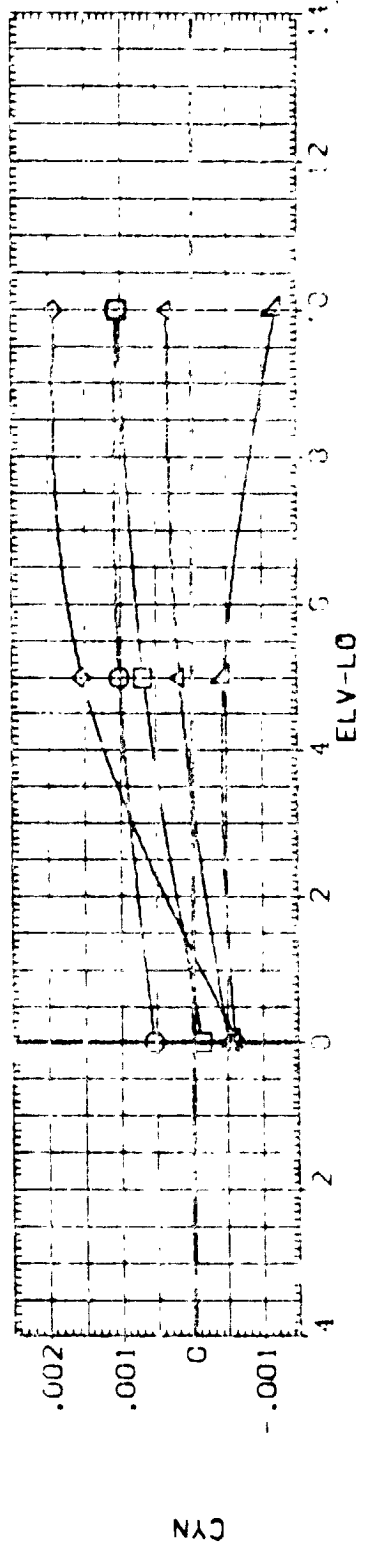
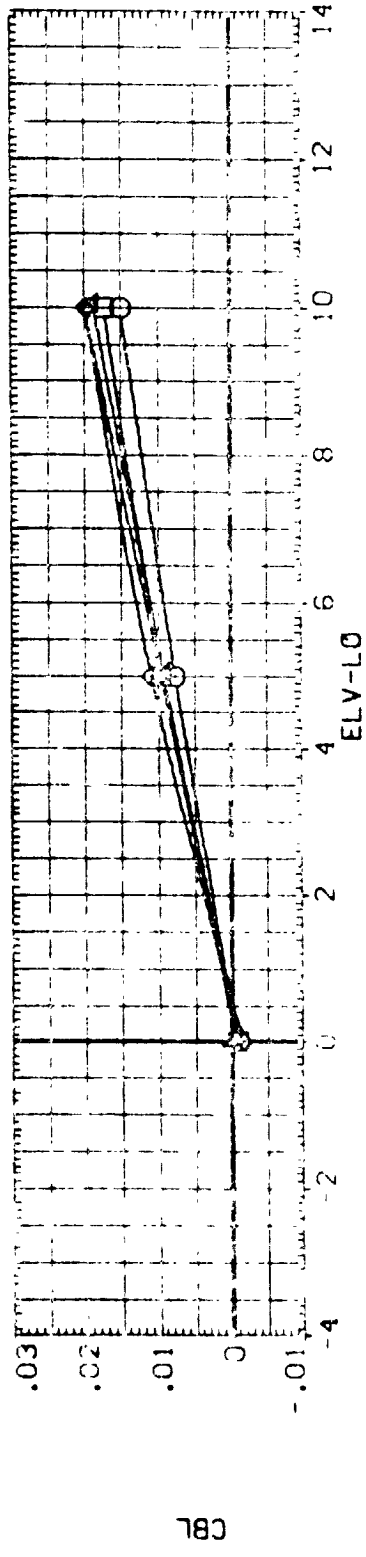


FIGURE 11. OUTBOARD AILERON ROLL CHARACTERISTICS

(M)MACH = 1.08

DATA SET SYMBOL CONF IGURATION DESCRIPTION ALPHA

DATA SET SYMBOL	CONF IGURATION DESCRIPTION	ALPHA
(BH)A01)	LA-16 (-FT TPT 680 RI-0898/139 DR8 SPL IT ELEVON	.000
(BH)A02)	LA-16 (-FT TPT 680 RI-0898/139 DR8 SPL IT ELEVON	5.000
(BH)A03)	LA-16 (-FT TPT 680 RI-0898/139 DR8 SPL IT ELEVON	10.000
(BH)A04)	LA-16 (-FT TPT 680 RI-0898/139 DR8 SPL IT ELEVON	15.000
(BH)A05)	LA-16 (-FT TPT 680 RI-0898/139 DR8 SPL IT ELEVON	18.000



DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA

(B-1A01)	LA-48 8-FT IPT 580 RI-0898/39	0.00
(B-1A02)	LA-48 8-FT IPT 580 RI-0898/39	5.000
(B-1A03)	LA-48 8-FT IPT 580 RI-0898/39	10.000
(B-1A04)	LA-48 8-FT IPT 580 RI-0898/39	15.000
(B-1A05)	LA-48 8-FT IPT 580 RI-0898/39	18.000

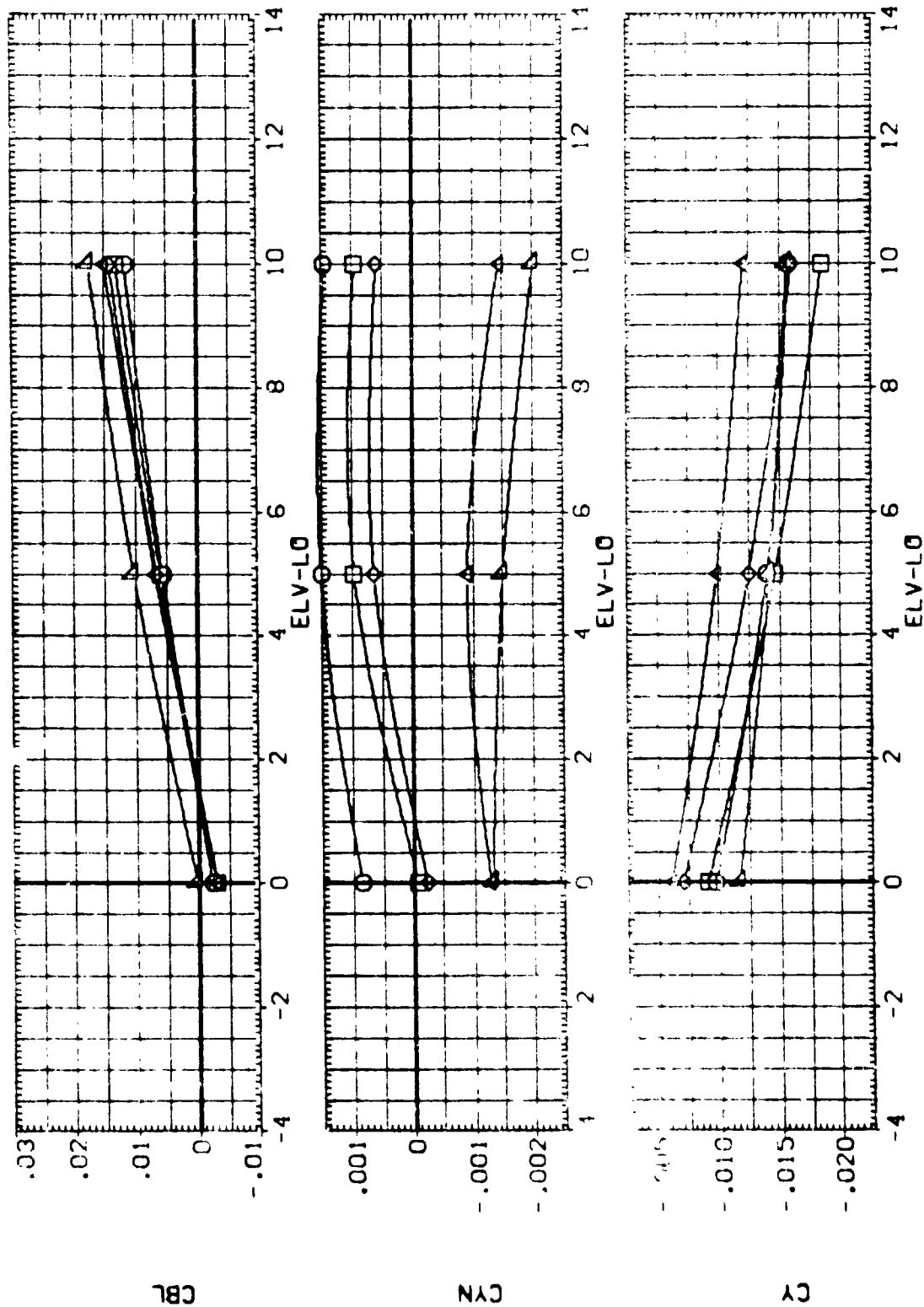
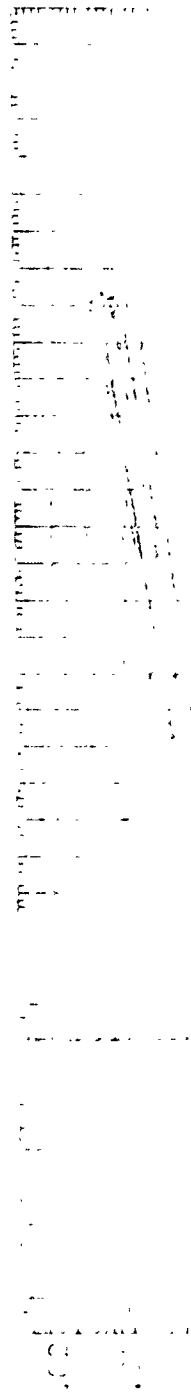


FIGURE 12. OUTBOARD AILERON ROLL CONTROL EFFECTIVENESS (INBOARD ELEVON DEFLECTED)
(8)MACH = .80

DATA SET	SYMBOL	CONFIGURATION	DESCRIPTION	ALPHA
(01)A01	LA-48	8-FT	1PT 880 RI-0880	1.00
(02)A02	LA-48	8-FT	1PT 880 RI-0880	5.00
(03)A03	LA-48	8-FT	1PT 880 RI-0880	10.00
(04)A04	LA-48	8-FT	1PT 880 RI-0880	15.00
(05)A05	LA-48	8-FT	1PT 880 RI-0880	18.00



DATA SET	SYMBOL	CONFIGURATION	DESCRIPTION
31-10-01		4 48 3 47 101 500 01	5003
31-10-02		3 47 101 500 01	5004
31-10-03		3 47 101 500 01	5005
31-10-04		3 47 101 500 01	5006
31-10-05		3 47 101 500 01	5007

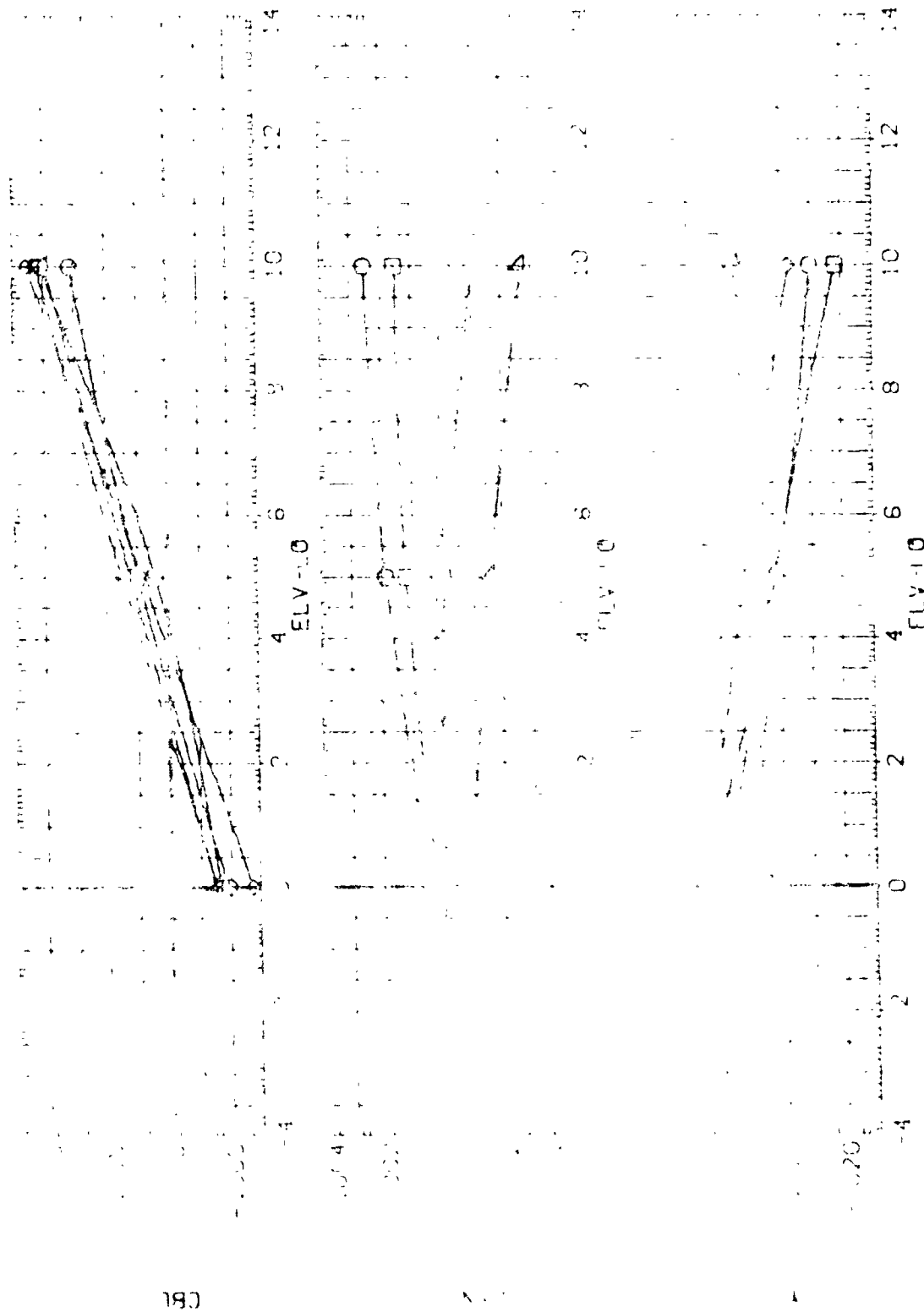


FIGURE 12. OUTBOARD AILERON ROLL CONTROL EFFECTIVENESS (INBOARD DEFLECTED)
(C)MACH = .90 PAGE 104

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA
(B-1A01)	LA-48 8-FT TPT 680 RI-0898/139 088 SPL IT ELEVON	.000
(B-1A02)	LA-48 8-FT TPT 680 RI-0898/139 088 SPL IT ELEVON	.000
(B-1A03)	LA-48 8-FT TPT 680 RI-0898/139 088 SPL IT ELEVON	.000
(B-1A04)	LA-48 8-FT TPT 680 RI-0898/139 088 SPL IT ELEVON	.000
(B-1A05)	LA-48 8-FT TPT 680 RI-0898/139 088 SPL IT ELEVON	.000

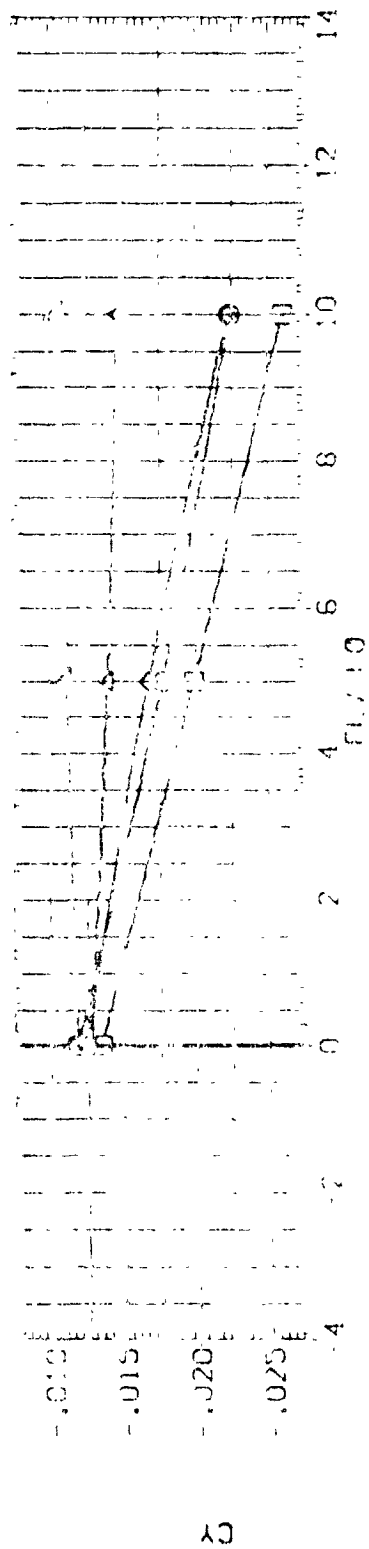
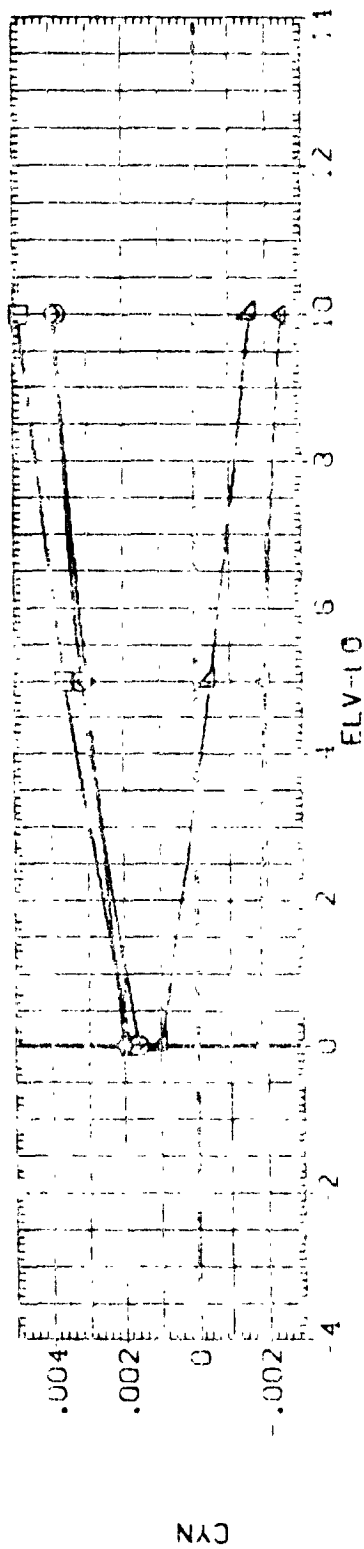
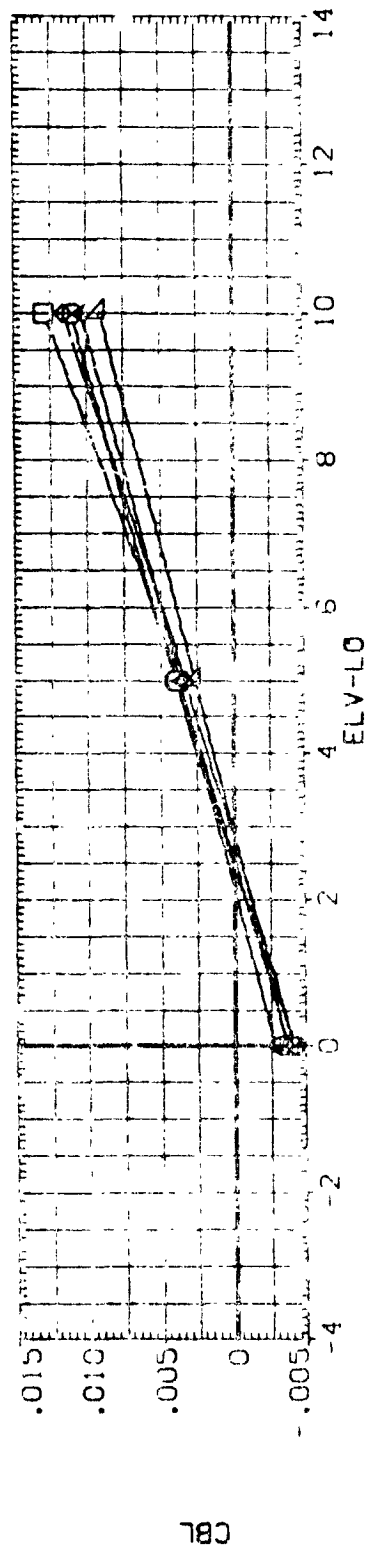


Figure 1. CBL, CYN, and CY vs ELV-L0 for various ALPHA values.

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA

[B]A01)	LA-48 3-FT PT 580 RI -0888/38	0.000
[B]A02)	LA-48 3-FT PT 580 RI -0888/38	0.000
[B]A03)	LA-48 3-FT PT 580 RI -0888/38	0.000
[B]A04)	LA-48 3-FT PT 580 RI -0888/38	0.000
[B]A05)	LA-48 3-FT PT 580 RI -0888/38	0.000

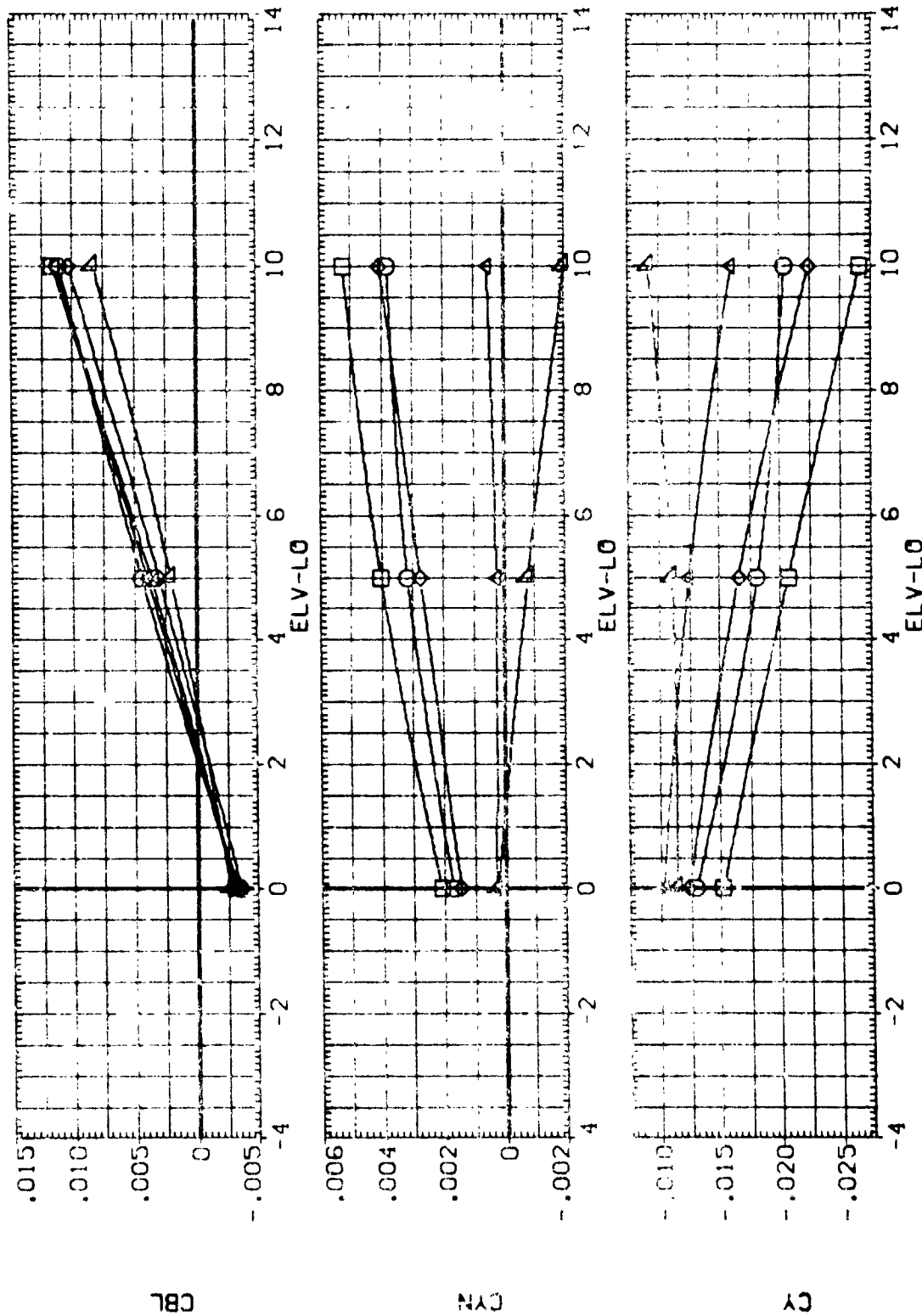
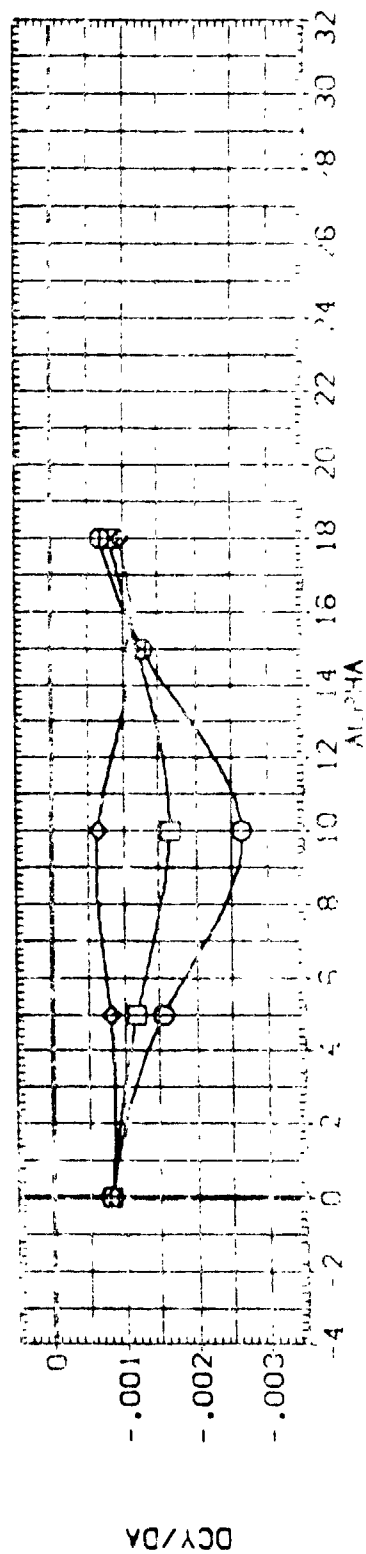
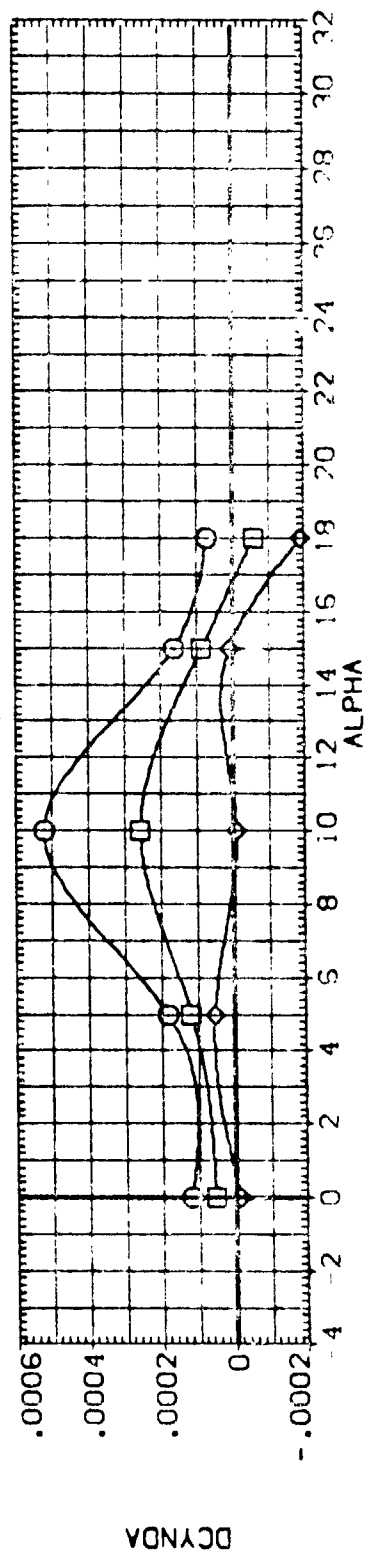
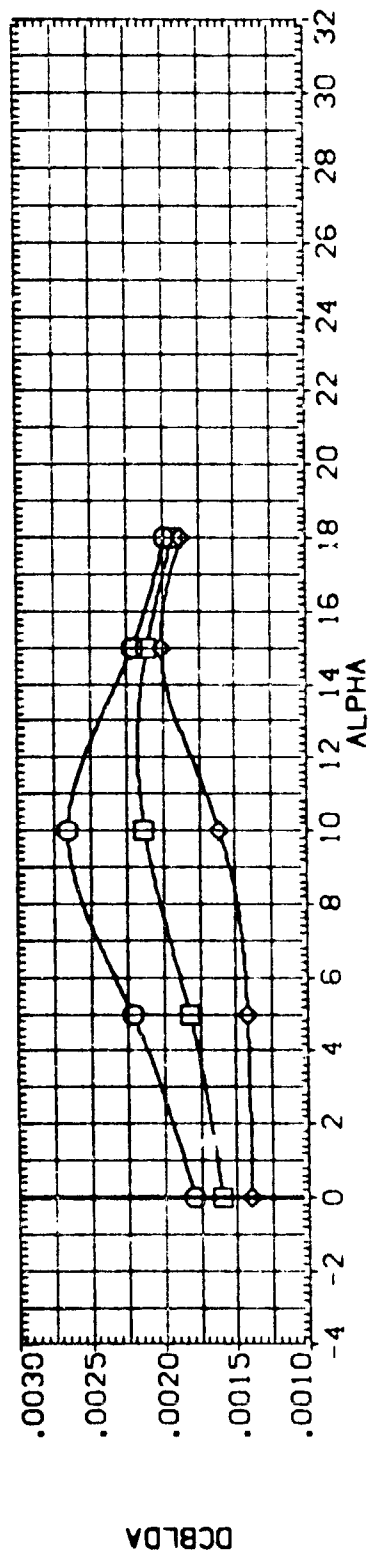


FIGURE 12. OUTBOARD AILERON ROLL CONTROL EFFECTIVENESS (INBOARD ELEVON DEFLECTED)
(M)MACH = 1.08

DATA SET SYMBOL



[Illegible handwritten notes]

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CH1003) LA-48 8-FT IPT 580 R1-0858/138 CR8 SPLIT ELEVON
 (CH1008) LA-48 8-FT IPT 580 R1-0858/138 CR8 SPLIT ELEVON
 (CH1009) LA-48 8-FT IPT 580 R1-0858/138 CR8 SPLIT ELEVON

ELEV LG ELEV HI ELEV RD
 .000 -20.000 -20.000
 5.000 -20.000 -20.000
 10.000 -20.000 -20.000

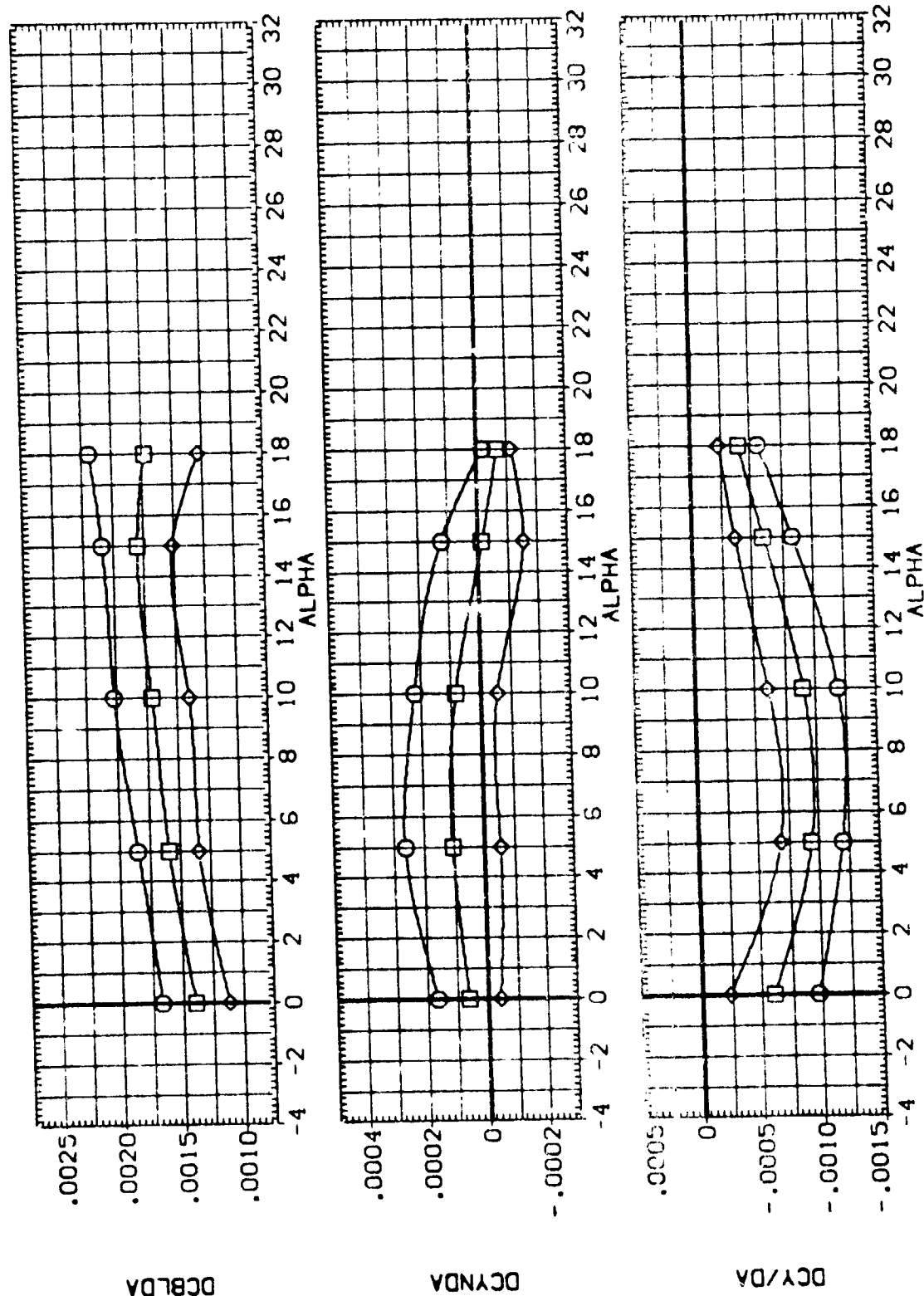


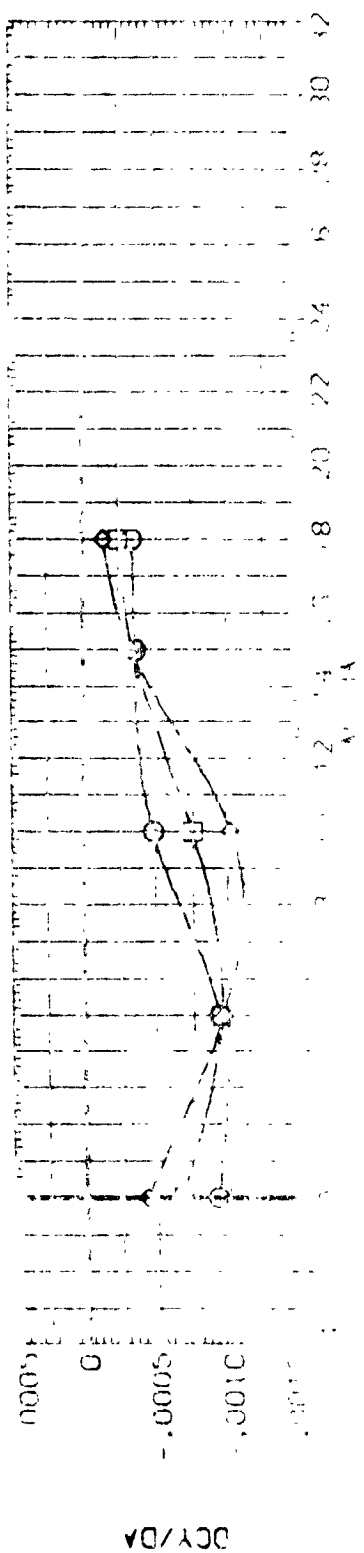
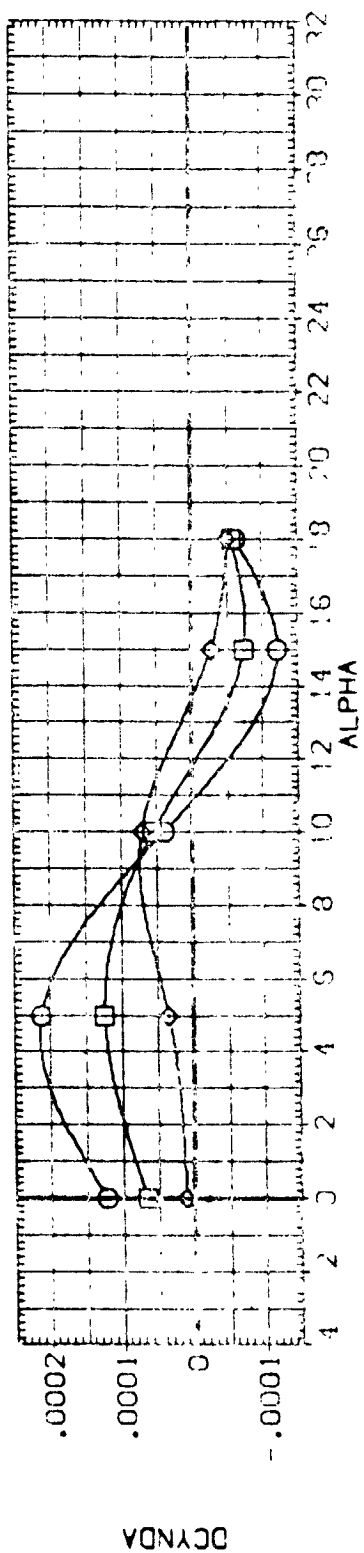
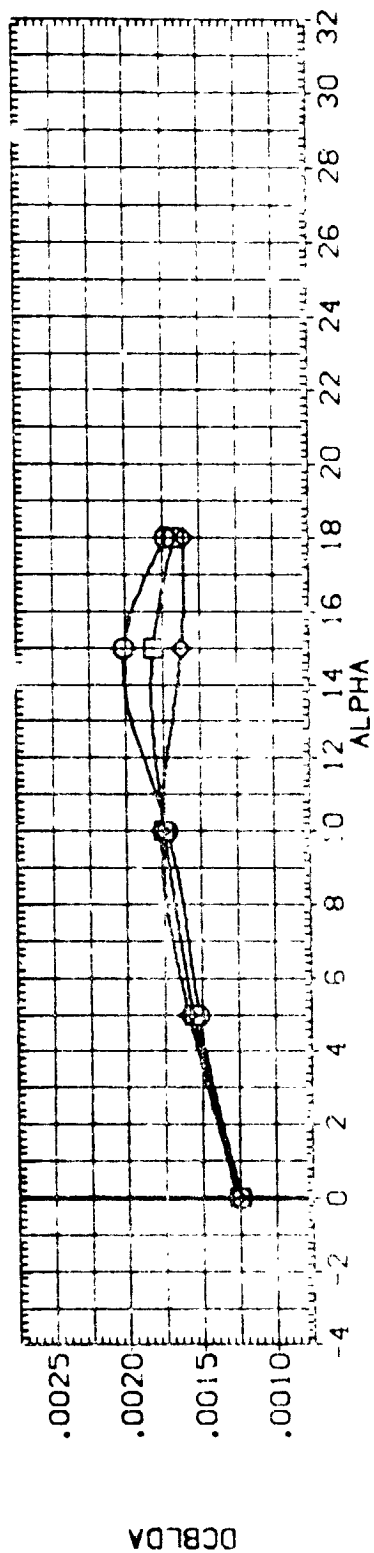
FIGURE 12. OUTBOARD AILERON ROLL CONTROL EFFECTIVENESS(INBOARD ELEVON DEFLECTED)
 (B)MACH = .80
 PAGE 110

DATA SET SYMBOL CONFIGURATION DESCRIPTION ELV-L0 ELV-L1 ELV-R1 ELV-R0

(041003) LA-18 8-FT TPT 680 RI-0898/139 078 078 SPLIT ELEVON .000 -20.000 -20.000 .000

(041008) LA-18 8-FT TPT 680 RI-0898/139 078 078 SPLIT ELEVON 5.000 -20.000 -20.000 -5.000

(041009) LA-18 8-FT TPT 680 RI-0898/139 078 078 SPLIT ELEVON 10.000 -20.000 -20.000 -10.000



DATA SET SYMBOL "3F10QW" ON DESCRIPTION
 (CH1003) LA-48 8-FT ST 580 RI-0898/139 098 SPL IT ELEVON
 (CH1008) LA-48 8-FT "P" 580 RI-0898/139 098 SPL IT ELEVON
 (CH1009) LA-48 8-FT "P" 580 RI-0898/139 098 SPL IT ELEVON

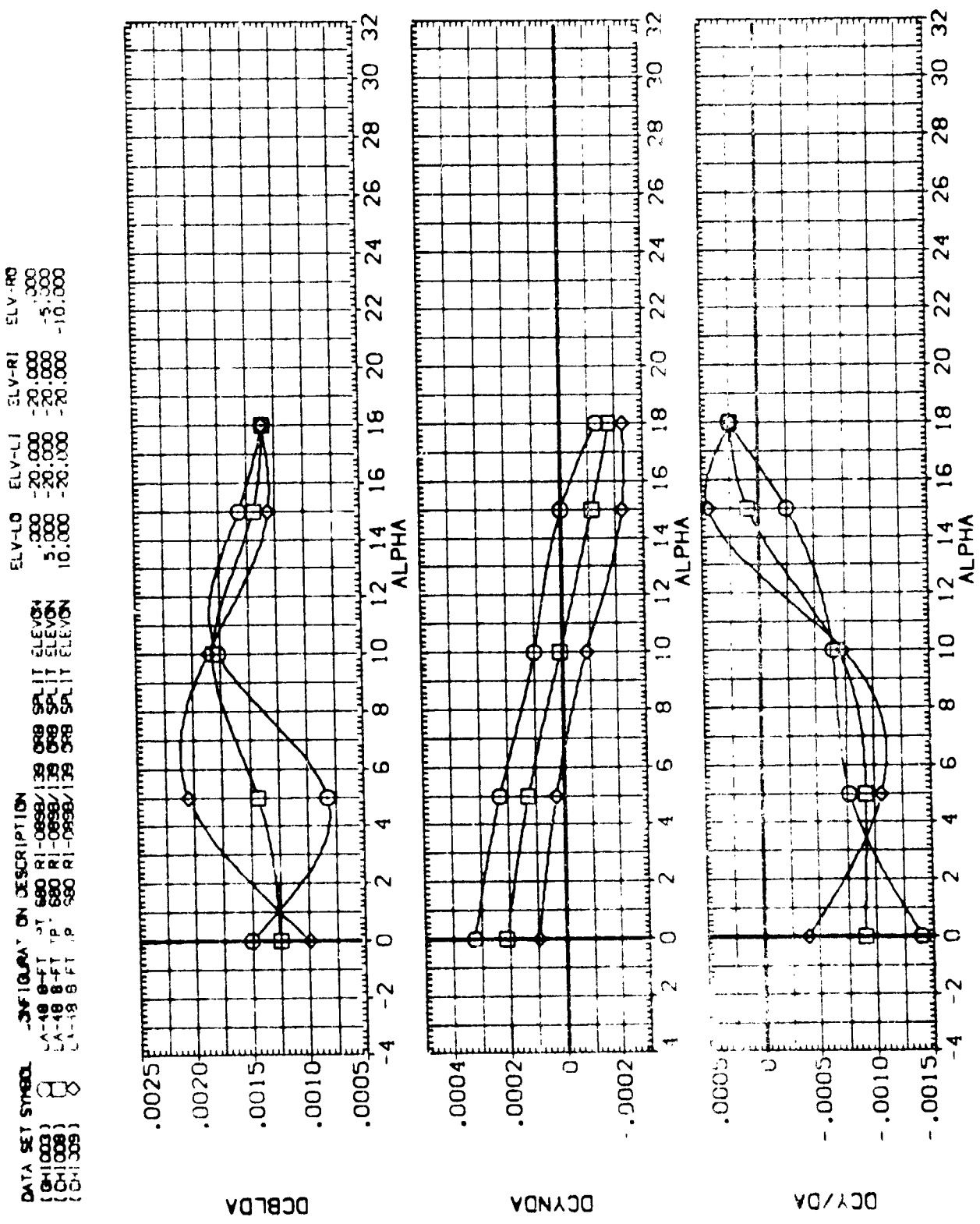


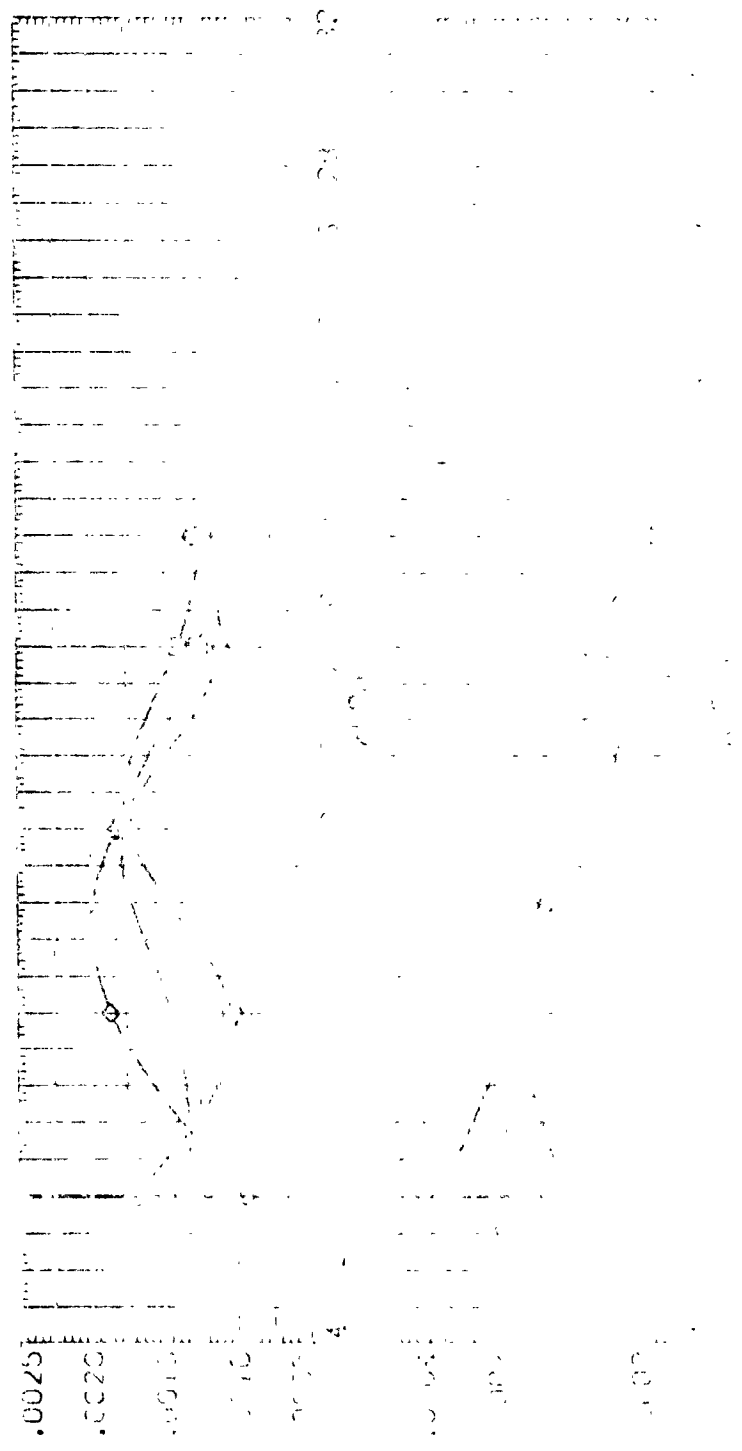
FIGURE 12. OUTBOARD AILERON ROLL CONTROL EFFECTIVENESS (INBOARD ELEVON DEFLECTED)
 (0)MACH = .90 PAGE 112

DATA SET SYMBOL CONFIGURATION DESCRIPTION ELV-LG ELV-LI ELV-RI ELV-R9

(GH1003) LA-48 8-FT TPT 690 RI-0693/35 038 SPL IT ELEVON .000 -20.000 -20.000 .000

(GH1008) LA-48 8-FT TPT 690 RI-0693/35 038 SPL IT ELEVON 5.000 -20.000 -20.000 -5.000

(GH1009) LA-48 8-FT TPT 690 RI-0693/35 038 SPL IT ELEVON 10.000 -20.000 -20.000 -10.000



VC000

DATA SET SYMBOL CONFIGURATION DESCRIPTION ELV-L0 ELV-L1 ELV-R1 ELV-R0

(0-1000) CA-48 8-FT IPT 680 RI-0898/139 ORB SPLIT ELEVON .000 -20.000 -20.000 .000

(0-1008) CA-48 8-FT IPT 680 RI-0898/139 ORB SPLIT ELEVON .000 -20.000 -20.000 -5.000

(0-1009) CA-48 8-FT IPT 680 RI-0898/139 ORB SPLIT ELEVON .000 -20.000 -20.000 -10.000

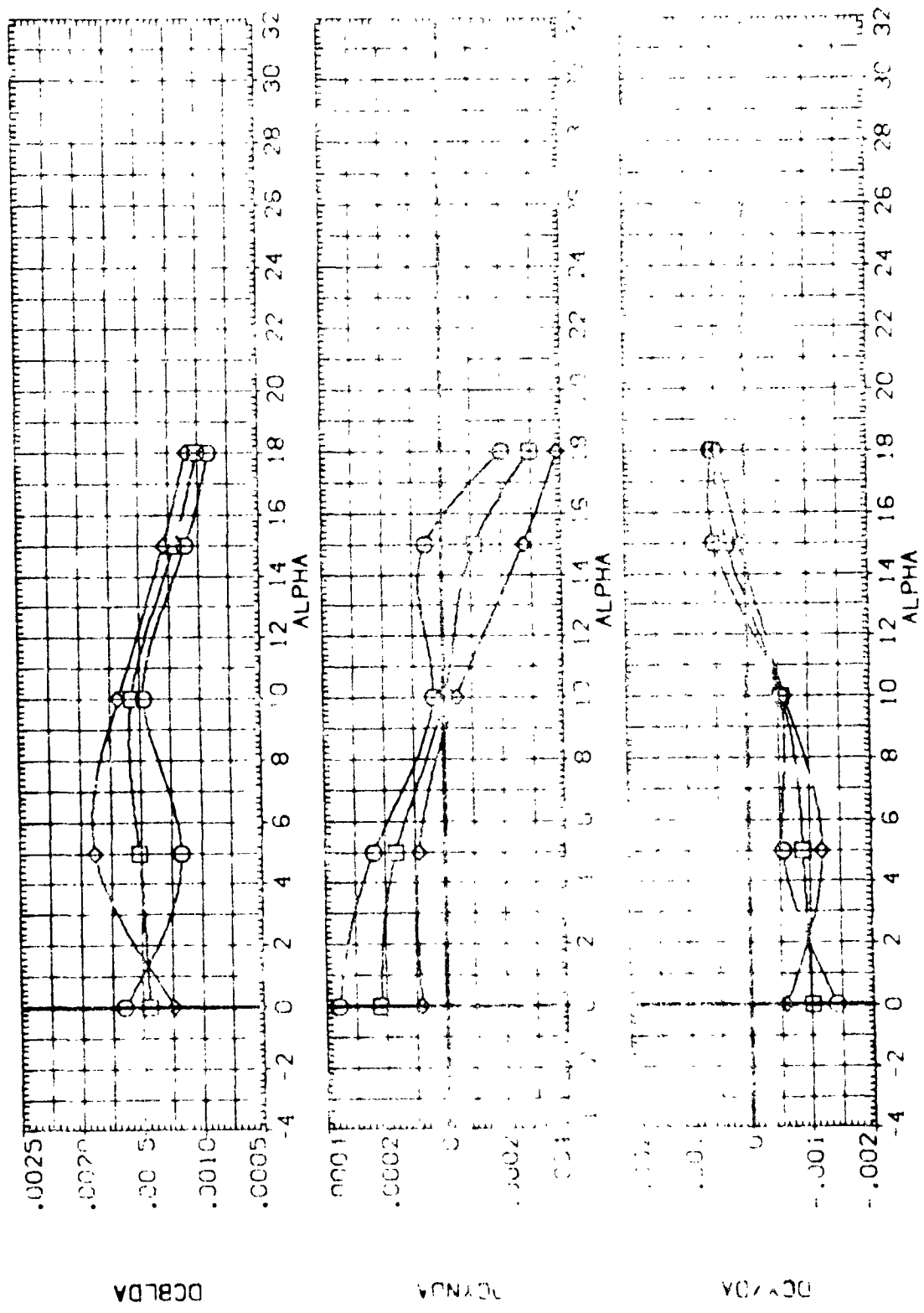


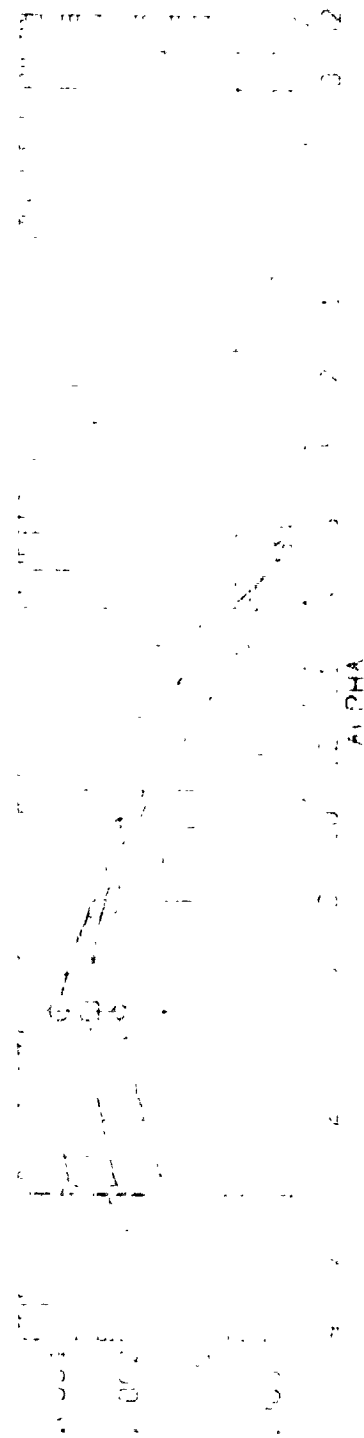
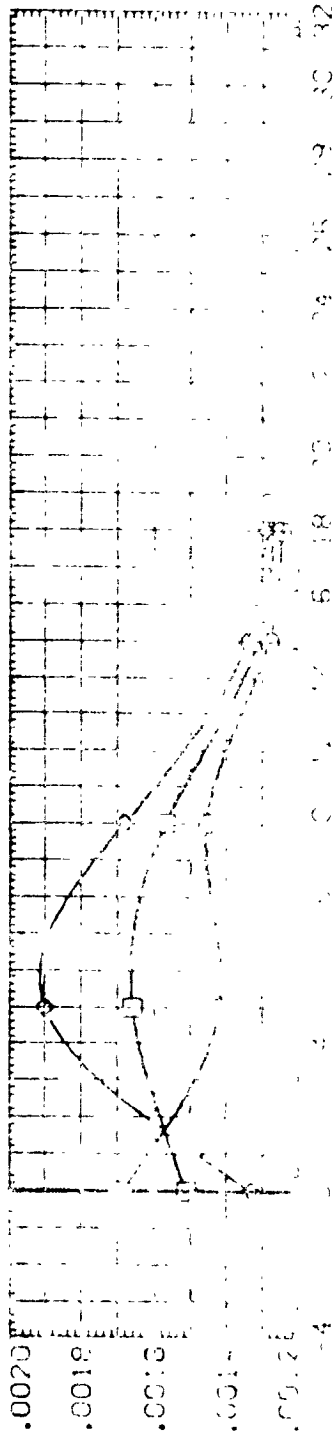
FIGURE 12. OUTBOARD AILERON ROLL CONTROL EFFECTIVENESS (INBOARD ELEVON DEFLECTED)
(F)MACH = .95

DATA SET SYMBOL CONFIGURATION DESCRIPTION ELEV-L0 ELEV-L1 ELEV-R1 ELEV-R0

(GHI003) LA-18 8-FT TPT 680 RI-0938/128 000 -20.000 -20.000 000

(GHI008) LA-18 8-FT TPT 680 RI-0938/128 5.000 -20.000 -20.000 -5.000

(GHI009) LA-18 8-FT TPT 680 RI-0938/128 10.000 -20.000 -20.000 -10.000



DBLDA

ALPHA

DATA SET SYMBOL: 001003
 CONFIGURATION DESCRIPTION: LA-48 8-FT TPT 680 RI-0898/ 38 098 SPLIT ELEVON
 LA-48 8-FT TPT 680 RI-0898/ 38 098 SPLIT ELEVON
 LA-48 8-FT TPT 680 RI-0898/ 38 098 SPLIT ELEVON
 LA-48 8-FT TPT 680 RI-0898/ 38 098 SPLIT ELEVON
 ELV-L0 ELV-L1 ELV-R1 ELV-R0
 0.000 0.000 0.000 0.000
 5.000 5.000 5.000 5.000
 10.000 10.000 10.000 10.000
 15.000 15.000 15.000 15.000

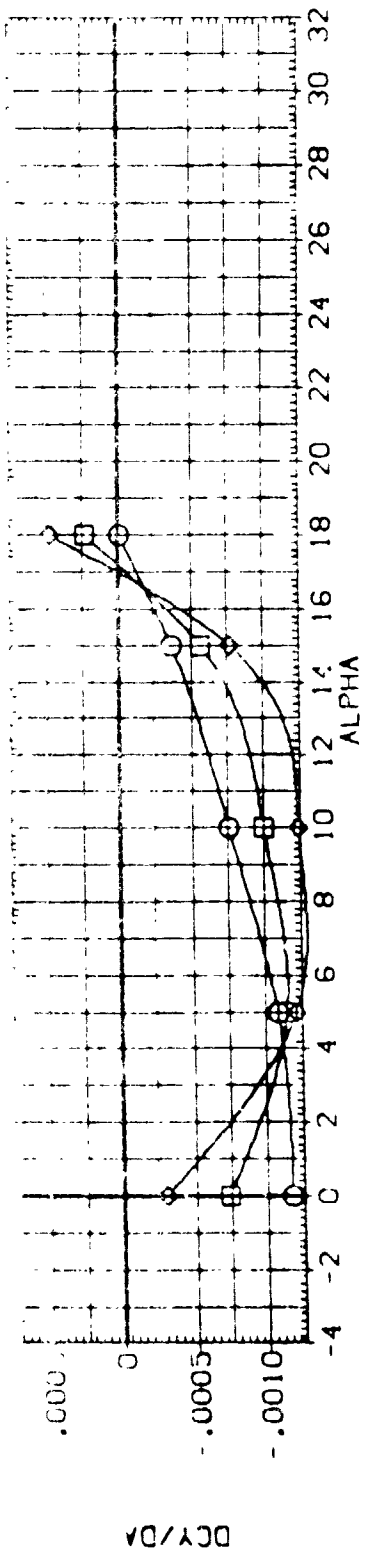
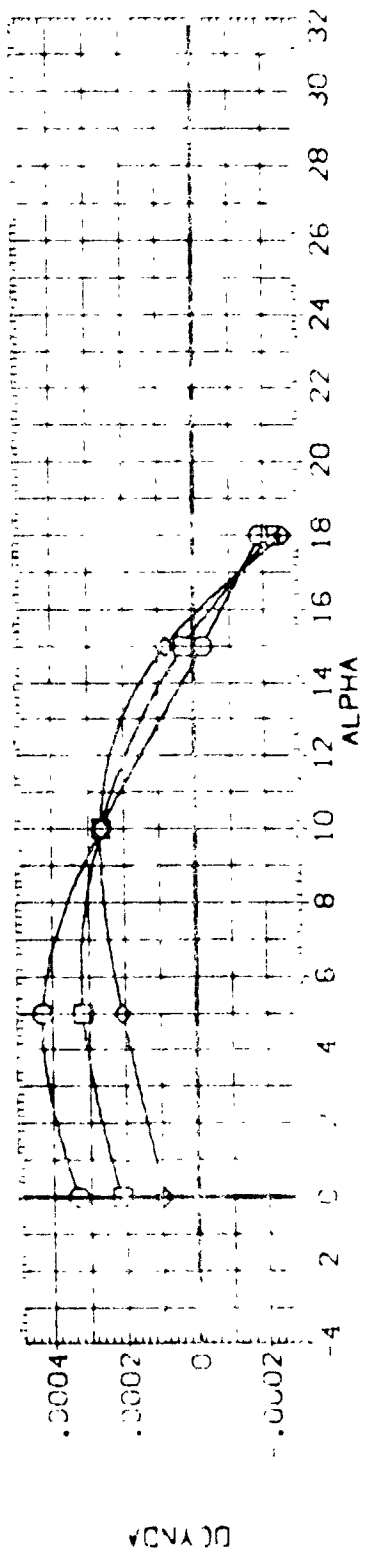
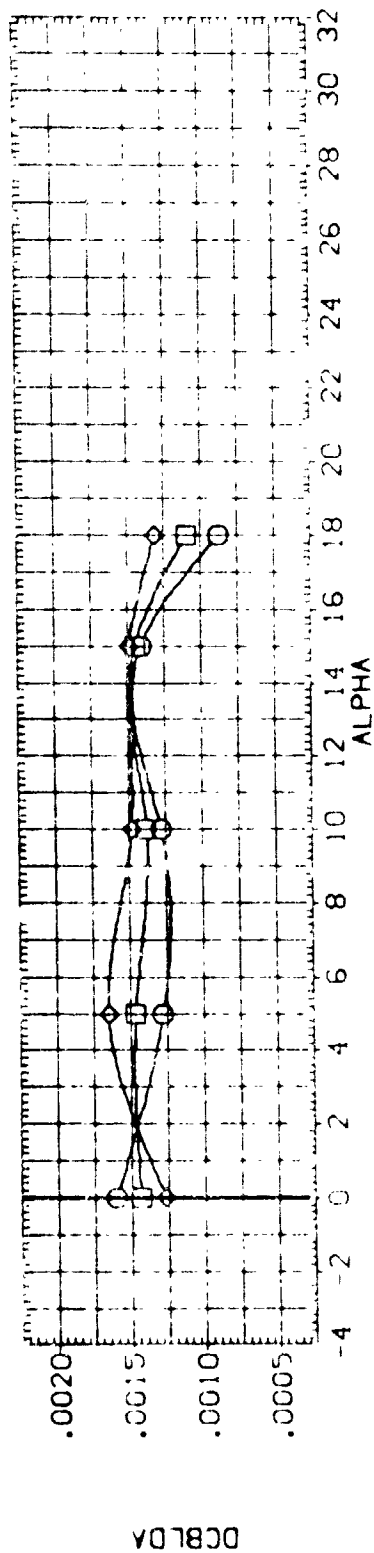


FIGURE 12. OUTBOARD AILERON ROLL CONTROL EFFECTIVENESS (INBOARD ELEVON DEFLECTED)

(M)MACH = 1.08

DATA SET SYMBOL: **Q** CONFIGURATION DESCRIPTION: LA-48 8-FT TPT 680 R1 -0898/38 ORB SPL IT ELEVON
 (EH1012) LA-48 8-FT TPT 680 R1 -0898/35 ORB SPL IT ELEVON
 (EH1010) LA-48 8-FT TPT 680 R1 -0898/33 ORB SPL IT ELEVON
 (EH1011) LA-48 8-FT TPT 680 R1 -0898/33 ORB SPL IT ELEVON

ELV-L0 ELV-L1 ELV-R1 ELV-R0
 .000 -10.000 -10.000 -20.000
 -15.000 -20.000 -20.000 -30.000
 -10.000 -20.000 -20.000 -30.000

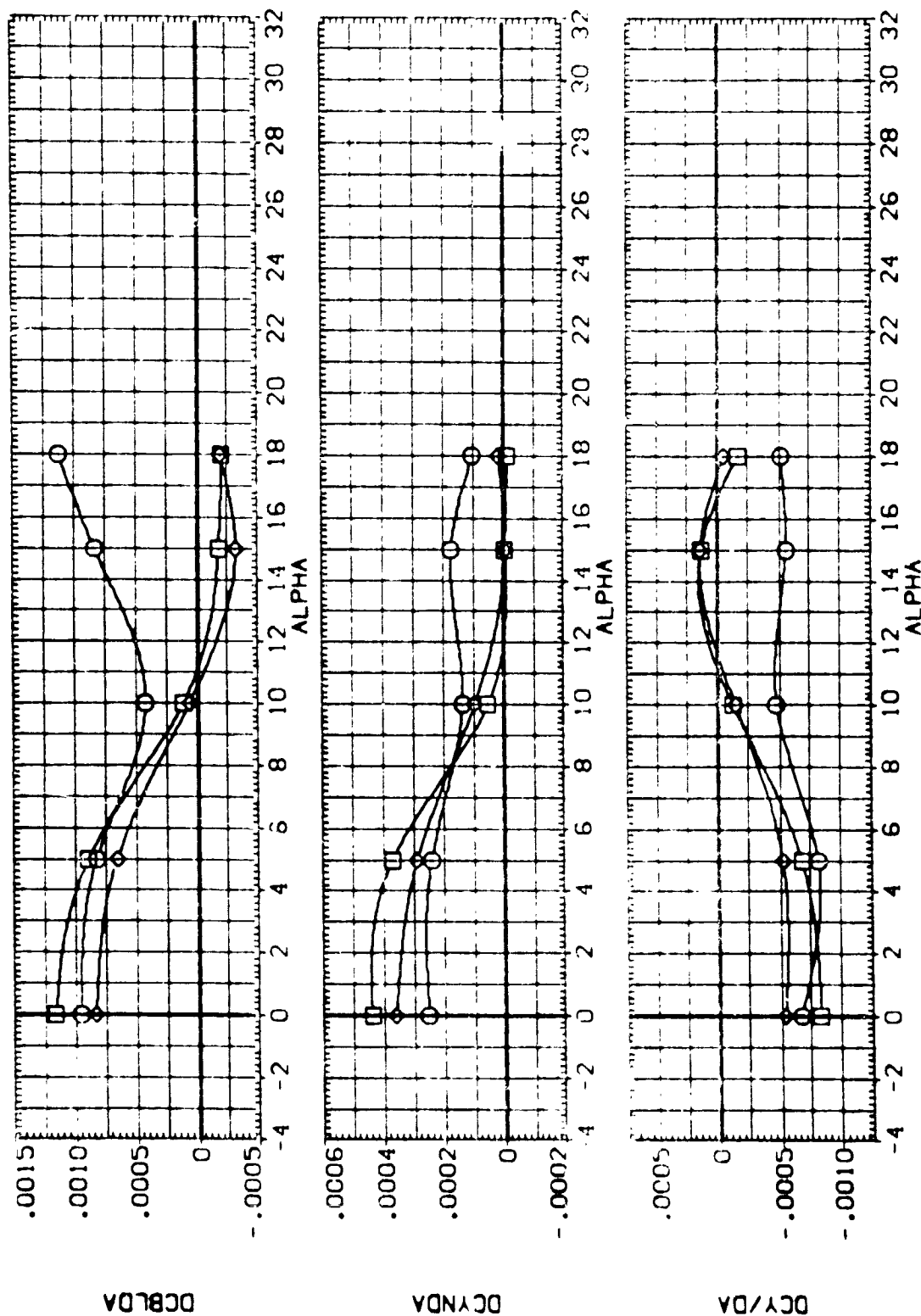


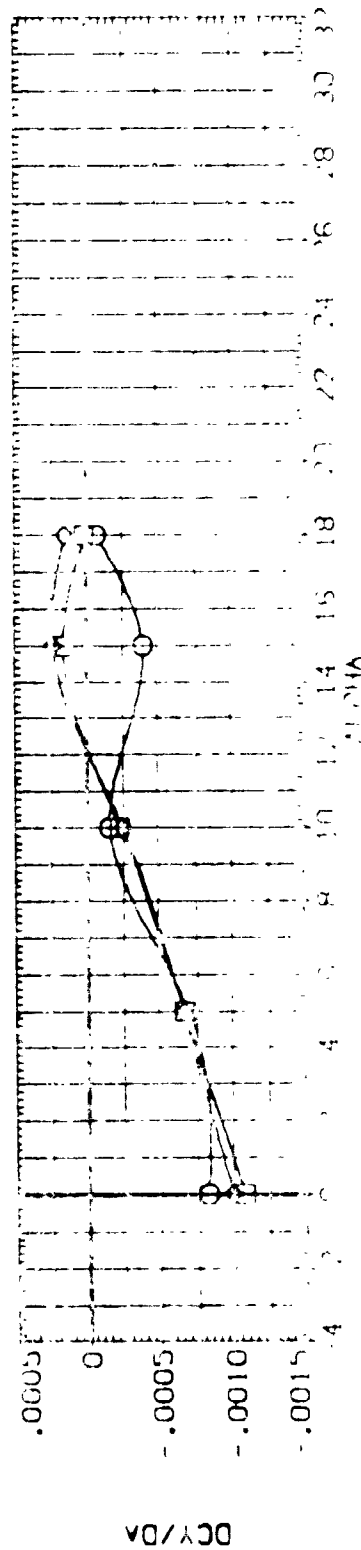
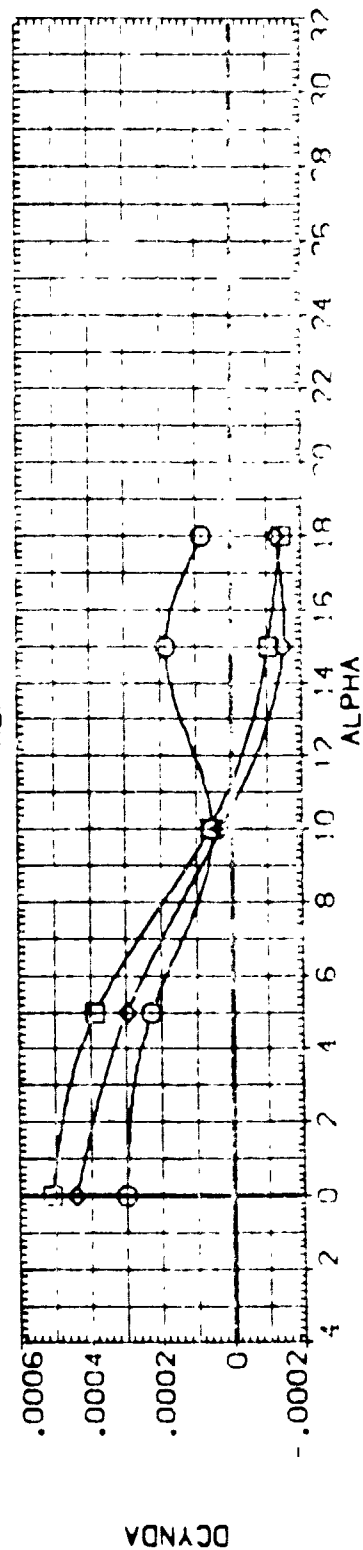
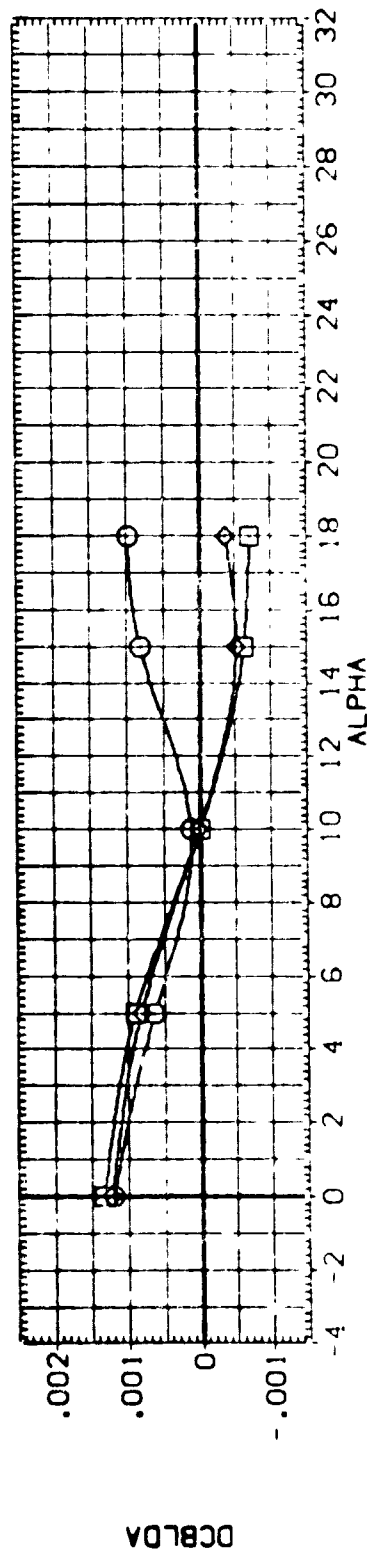
FIGURE 13. OUTBOARD AILERON ROLL CONTROL EFFECTIVENESS(FULL SPAN ELEVON DEFLEC)
 (B)MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION ELV-LO ELV-LI ELV-RI ELV-RO

{EM1012} LA-18 8-FT TPT 580 RI-0838/138 083 083 083 083

{EM1010} LA-18 8-FT TPT 580 RI-0838/138 083 083 083 083

{EM1011} LA-18 8-FT TPT 580 RI-0838/138 083 083 083 083



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (EM1012) LA-48 8-FT IPT 880 RI -0898/139 088 SPL T ELEVON
 (EM1010) LA-48 8-FT IPT 880 RI -0898/139 088 SPL T ELEVON
 (EM1011) LA-48 8-FT IPT 880 RI -0898/139 088 SPL T ELEVON

ELV-LO ELV-LI ELV-RI ELV-RO
 .000 -10.000 -10.000 -20.000
 -15.000 -20.000 -20.000 -30.000
 -10.000 -20.000 -20.000 -30.000

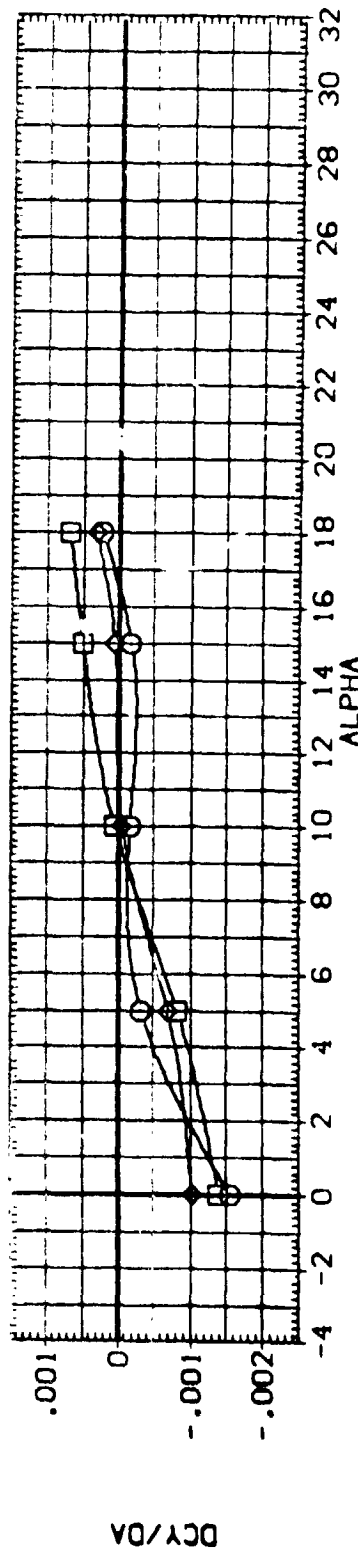
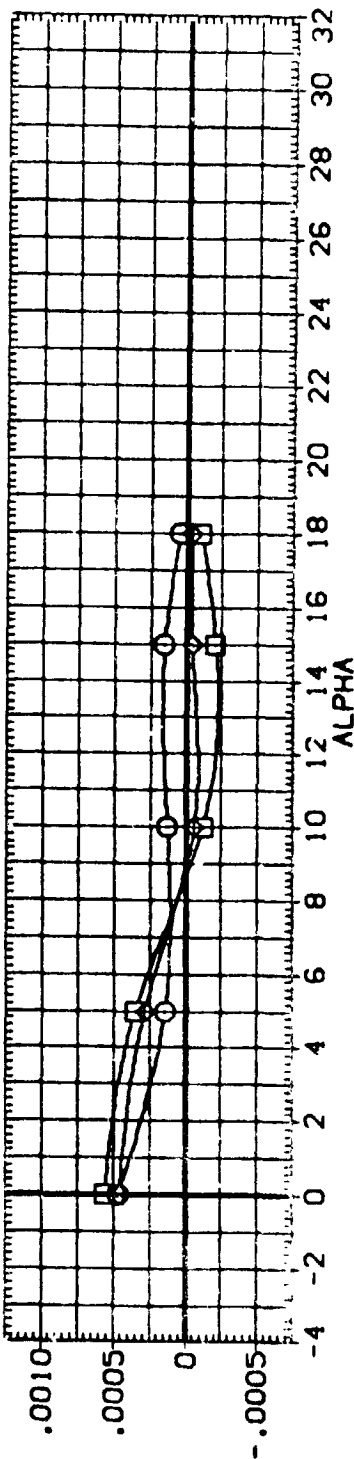
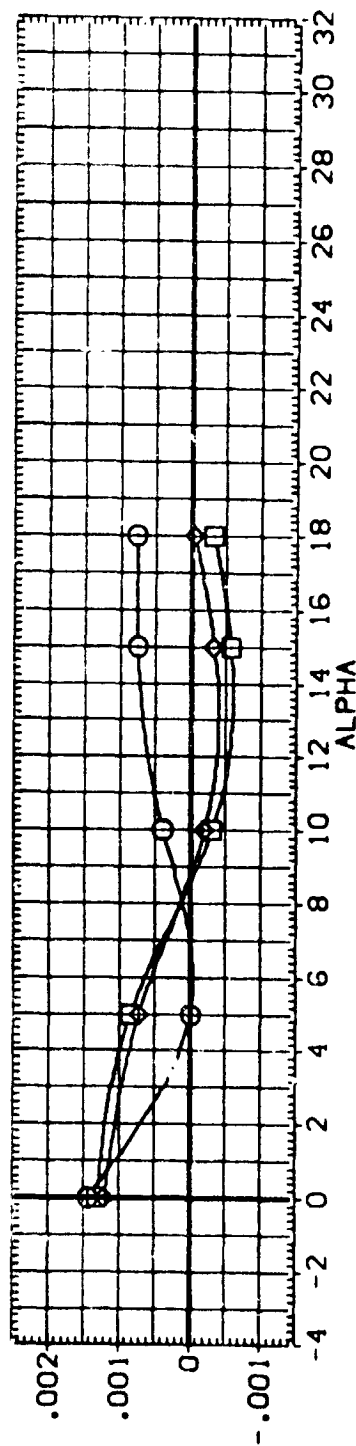


FIGURE 13. OUTBOARD AILERON ROLL CONTROL EFFECTIVENESS(FULL SPAN ELEVON DEFLEC)
 (O)MACH = .90



DATA SET SYMBOL CONFIGURATION DESCRIPTION ELV-LO ELV-LI ELV-RI ELV-RO

(EH1012) LA-48 8-FT TPT 680 RI-0698/139 078 SPLIT ELEVON .000 -10.000 -10.000 -20.000

(EH1010) LA-48 8-FT TPT 680 RI-0698/139 078 SPLIT ELEVON -15.000 -20.000 -20.000 -25.000

(EH1011) LA-48 8-FT TPT 680 RI-0698/139 078 SPLIT ELEVON -10.000 -20.000 -20.000 -30.000

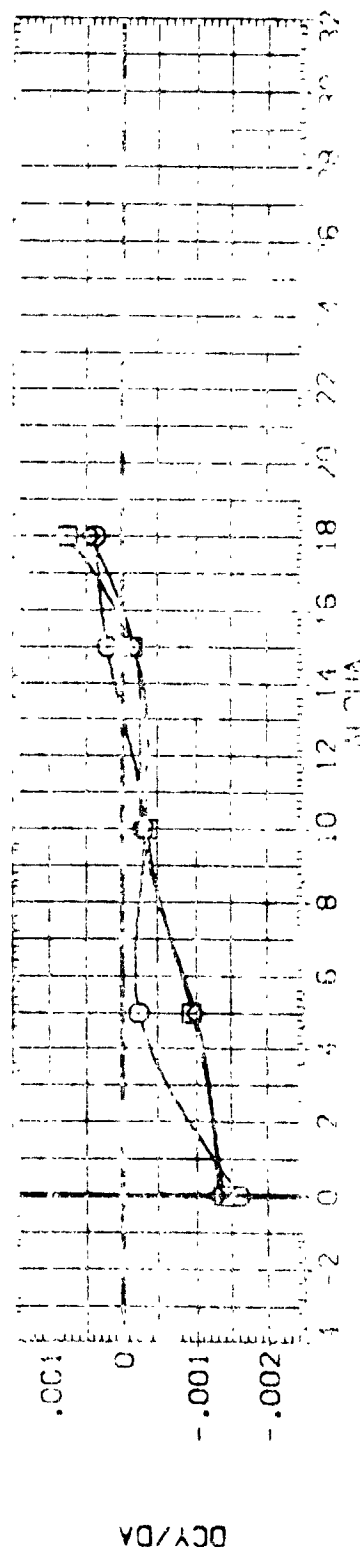
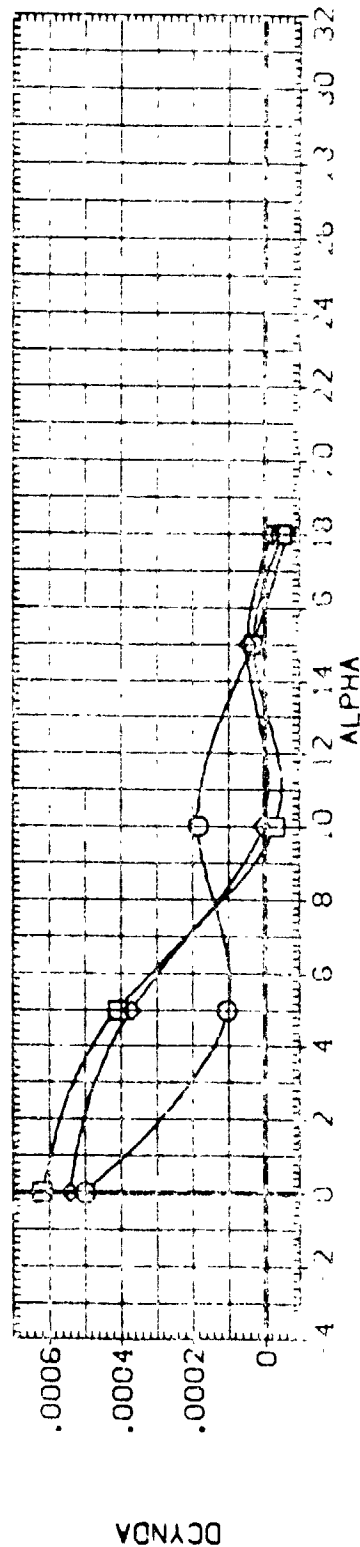
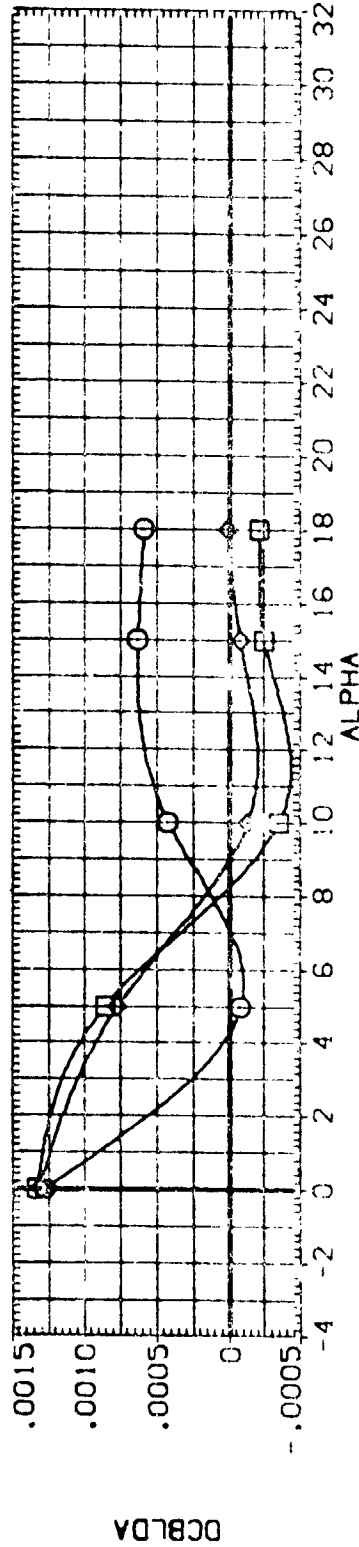


Figure 10-10

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(EH1012)	LA-48 8-FT IPT 680 RI -0858/138	048	SPLIT ELEVON	ELV-L0	ELV-L1	ELV-R1	ELV-R0
(EH1010)	LA-48 8-FT IPT 680 RI -0858/138	048	SPLIT ELEVON	.000	-10.000	-10.000	-20.000
(EH1011)	LA-48 8-FT IPT 680 RI -0858/138	048	SPLIT ELEVON	-15.000	-20.000	-20.000	-25.000
				-10.000	-20.000	-20.000	-30.000

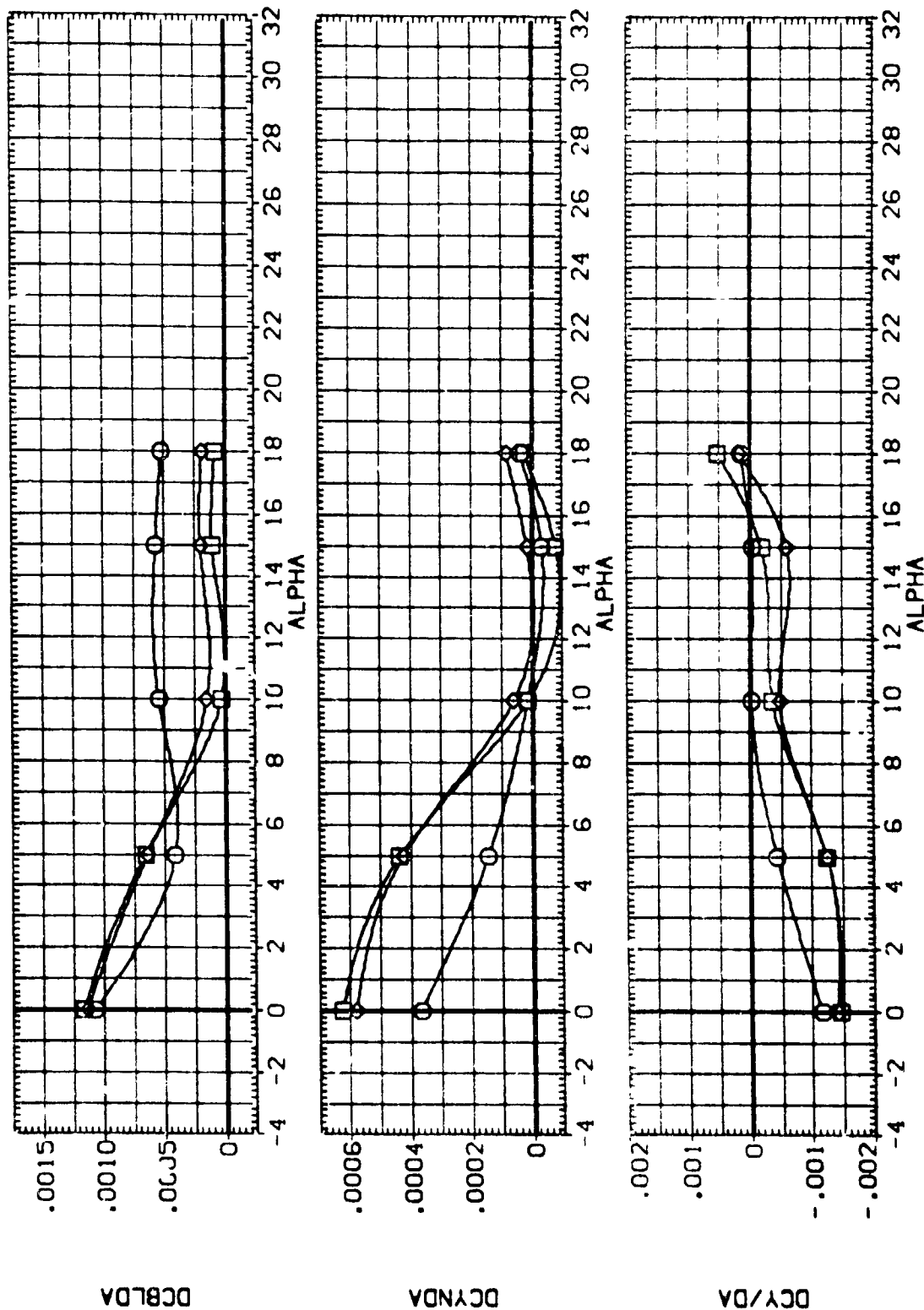
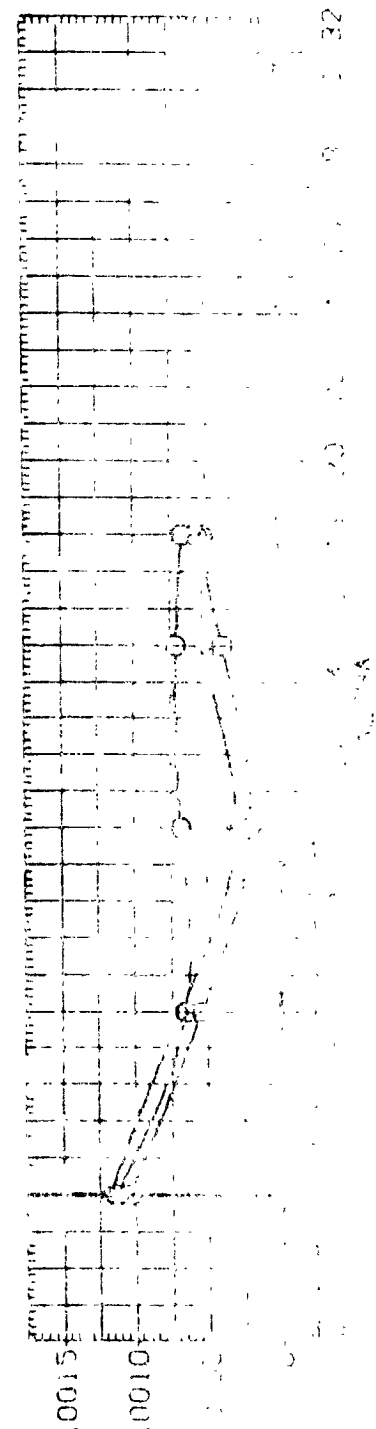


FIGURE 13. OUTBOARD AILERON ROLL CONTROL EFFECTIVENESS(FULL SPAN ELEVON DEFLEC)
(F)MACH = .95



DATA SET SYMBOL	CONFIDENCE	DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0
(E41012)	Q	LA-48 2-71 PT 250 RI-0898/139 038 SALT ELEVON	0.000	-10.000	-10.000	-20.000
(E41010)	Q	LA-48 2-71 PT 250 RI-0898/139 038 SALT ELEVON	-15.000	-20.000	-20.000	-25.000
(E41011)	Q	LA-48 2-71 PT 250 RI-0898/139 038 SALT ELEVON	-10.000	-20.000	-20.000	-30.000



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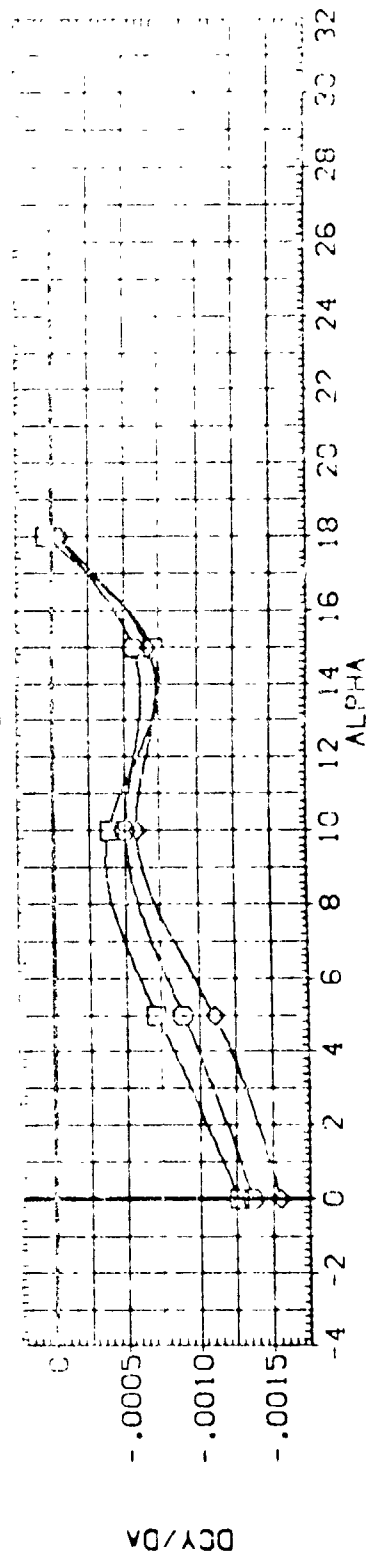
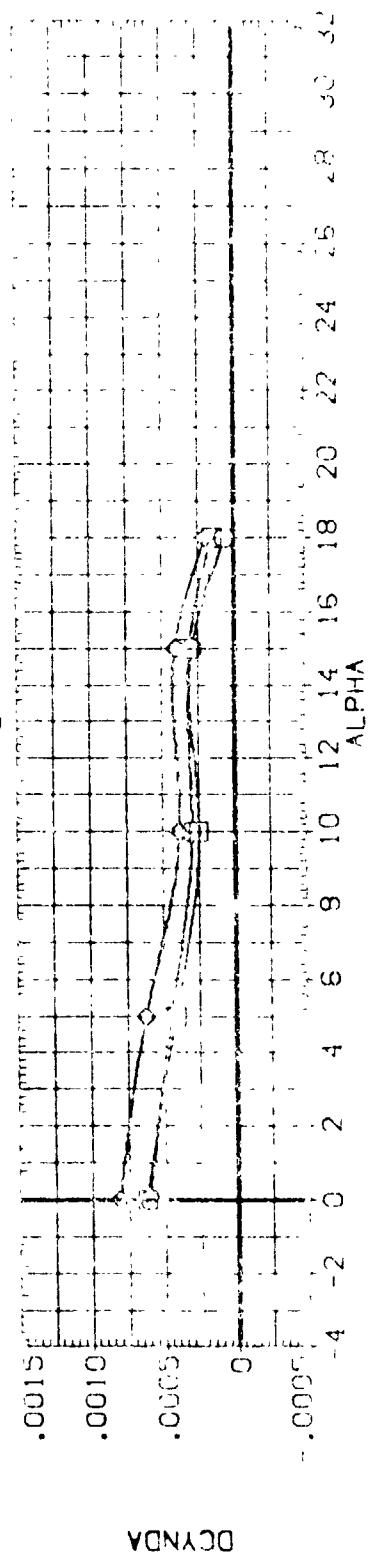
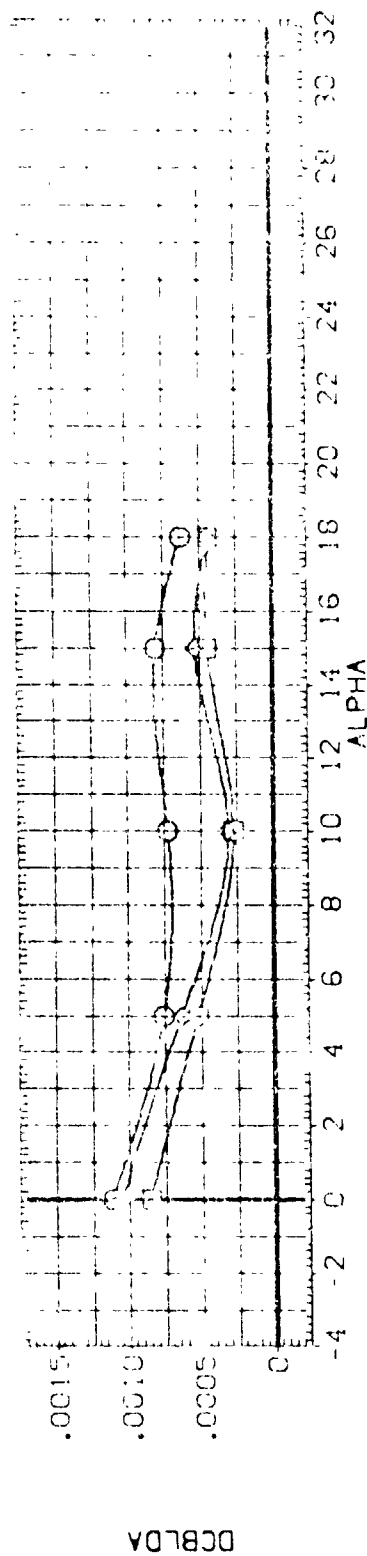


FIGURE 13. OUTBOARD AILERON ROLL CONTROL EFFECTIVENESS(FULL SPAN ELEVON DEFLECTED)

$$[H]_{MACH} = 1.08$$

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DATA SET SYMBOL CONFIGURATION DESCRIPTION ELV-LO ELV-LI ELV-RI ELV-RO
 (JH1005) LA-48 8-FT IPT 580 RI-0698/135 068 SPL IT ELEVON -10.000 -10.000 -10.000
 (JH1006) LA-48 8-FT IPT 580 RI-0698/135 068 SPL IT ELE SN -20.000 -20.000 -20.000

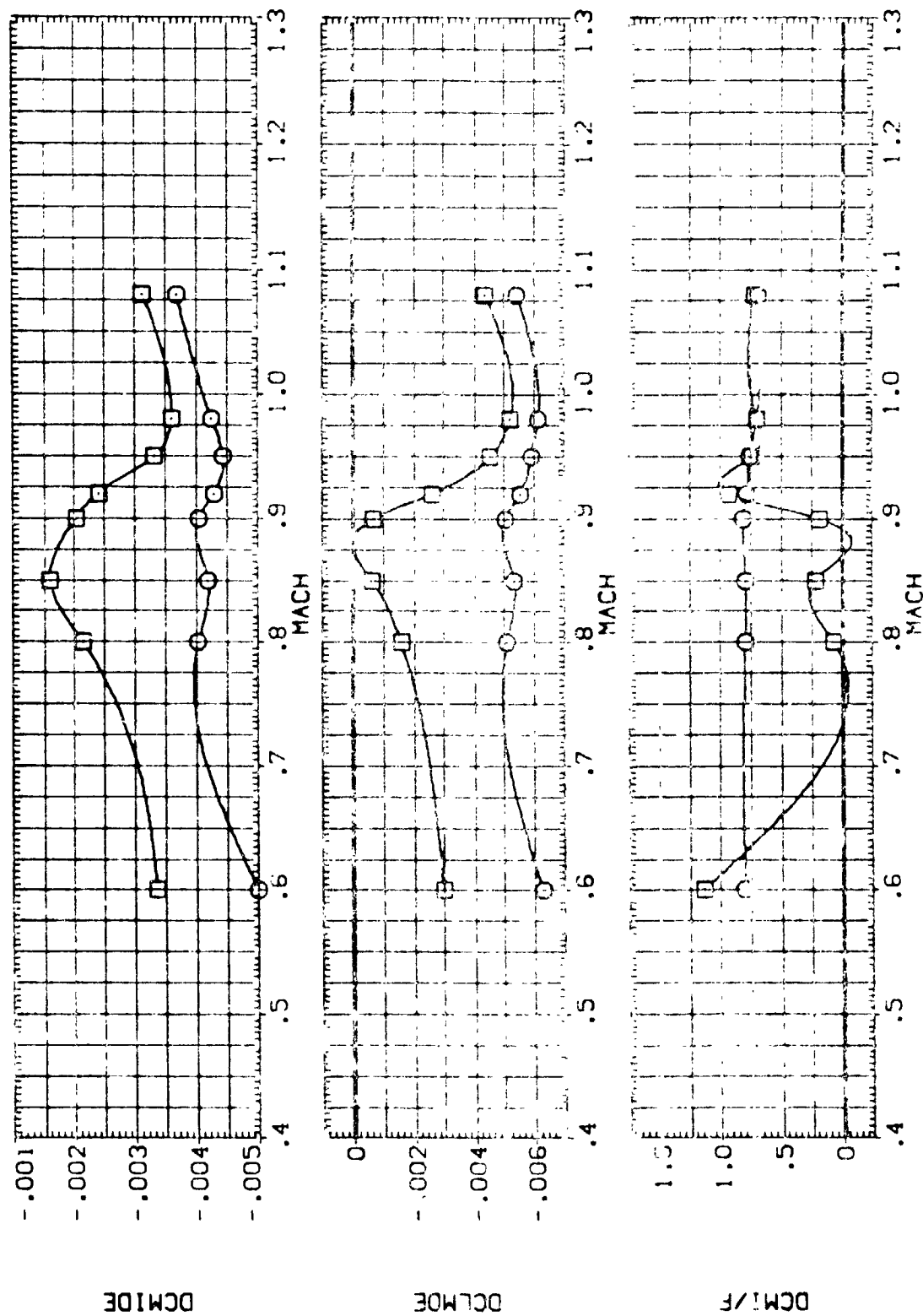


FIGURE 14. COMPARISON OF CONTROL EFFECTIVENESS FOR FULL SPAN AND INBD. ELEVON

APPENDIX
TABULATED SOURCE DATA

Plotted data tabulations are available from DMS
on request.

LA48 TABULATED SOURCE DATA

LA-48 8-FT TWT 680 RI-0998/139 ORB SPLIT ELEVON

PAGE 1

(RH1001)

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
 ELV-L1 = .000 ELV-R1 = .000
 ELV-RO = .000 BDFAP = .000
 SPOBRK = 25.000 AILRON = .000
 ELEVTR = .000

RUN NO. 71/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.598	-2.020	.00259	-.06035	.06376	-.00471	-.00306	.00076	-.00609	-.05426	.06597	-.88446
.599	.077	.00314	.03440	.06329	-.00497	-.00296	.00026	-.00427	.03431	.06533	.52319
.601	.777	.00478	.06795	.06516	-.00583	-.00309	.00013	-.00732	.06706	.06608	1.01491
.600	2.314	.00395	.14276	.06295	-.00719	-.00297	.00000	-.00951	.14011	.06957	2.04340
.598	4.291	.00669	.24149	.05741	-.00997	-.00320	-.00039	-.00963	.23652	.07531	3.14044
.600	7.353	.00360	.39864	.04329	-.01348	-.00432	-.00077	-.00597	.38992	.09396	4.14904
.599	9.794	.00320	.47790	.03527	-.01514	-.00476	-.00103	-.00453	.46834	.10904	4.28472
.598	10.592	.00383	.57933	.04554	-.02796	-.00209	.00025	-.00642	.56033	.15101	5.71049
.598	12.764	.00420	.69990	.05013	-.03747	-.00337	.00109	-.00354	.67153	.20353	3.29945
.600	14.849	.00354	.82154	.05319	-.04722	-.00337	-.00109	-.00207	.78047	.26194	2.97963
.597	16.927	.00467	.93491	.06071	-.05929	-.00333	-.00107	-.00392	.87673	.33729	2.65453
.598	19.171	.00645	1.07367	.06901	-.06302	-.00191	-.00126	-.00619	.99442	.40926	2.42091
.598	21.153	.00729	1.19325	.07706	-.06111	-.00182	-.00133	-.00739	1.09260	.49105	2.25051
.599	22.038	.00746	1.22547	.08713	-.05776	-.00232	-.00115	-.00923	1.11449	.51279	2.17342

RUN NO. 61/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.600	-2.060	.00094	-.07121	.06685	-.00167	-.00306	.00126	-.00482	-.06876	.06937	-.99122
.601	.072	.00320	.03378	.06948	-.00275	-.00401	.00093	-.00756	.03370	.06852	.49190
.799	2.038	.00640	.13702	.06724	-.00624	-.00426	.00028	-.00709	.13454	.07207	1.96676
.600	4.317	.00296	.26741	.06409	-.01295	-.00464	.00003	-.00679	.20495	.06351	3.05170
.600	6.637	.00621	.37544	.06669	-.01975	-.00412	.00016	-.00655	.25621	.10975	3.33699
.600	8.752	.00515	.49272	.06940	-.02544	-.00515	-.00044	-.00675	.46654	.14204	3.29447
.799	10.765	.00634	.57047	.07432	-.03065	-.00519	-.00069	-.00646	.54690	.17984	3.04097
.799	12.832	.00690	.69992	.07022	-.04056	-.00319	.00151	-.00226	.65402	.23023	2.94071
.600	15.190	.00933	.83966	.04337	-.00390	-.00347	.00167	-.00340	.79049	.30047	2.62412
.798	17.437	.01319	.97459	.06854	-.00798	-.00141	.00135	-.00944	.90324	.37697	2.39669
.798	19.906	.01559	1.09900	.09174	-.00849	-.00164	-.00191	-.00140	.96759	.44009	2.19061
.799	21.680	.01935	1.13279	.09484	-.00272	-.00303	-.00393	-.00052	1.01790	.50626	2.01042
.799	22.546	.01772	1.13797	.09593	-.00393	-.00482	-.00495	-.00244	1.01415	.52490	1.93246

ORIGINAL PAGE IS
 OF POOR QUALITY

LA48 TABULATED SOURCE DATA

PAGE 2

LA-48 9-PT TPT 680 RI-0898/139 CR8 SPLIT ELEVON

(RH1001)

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
 ELV-LI = .000 ELV-RI = .000
 ELV-RO = .000 BDFLAP = .000
 SPOBRK = 25.000 AIRCON = .000
 ELEVTR = .000

RUN NO. 51/ 0

WACH	ALPHA	BETA	CN	CA	CLM	COL	CYN	CY	CL	CD	L/D
.890	-1.975	.00408	-.04882	.07233	-.01413	-.00421	.00096	-.00659	-.04010	.07396	-.94221
.890	.204	.00670	.00882	.07430	-.01828	-.00482	.00087	-.00611	.07043	.07475	.93044
.891	2.403	.00932	.19310	.07433	-.02702	-.00590	-.00011	-.00631	.19181	.08245	2.32837
.890	4.239	.00998	.28136	.07577	-.02835	-.00477	.00001	-.00911	.27496	.09646	2.89551
.890	6.549	.00977	.39003	.07942	-.03394	-.00488	-.00003	-.00843	.37842	.12339	3.06684
.890	8.790	.00908	.50139	.08296	-.04204	-.00706	-.00039	-.00566	.48293	.19827	3.05123
.849	10.878	.01110	.60420	.08780	-.05049	-.00315	-.00135	-.00623	.57678	.20024	2.88044
.890	12.876	.01215	.71280	.09231	-.06374	-.00318	-.00243	-.00403	.67425	.24903	2.70730
.849	15.246	.01280	.86314	.09636	-.07761	-.00430	-.00124	-.00412	.80743	.31994	2.52371
.890	17.412	.01459	.96932	.10015	-.08392	-.00492	-.00156	-.00921	.89513	.38568	2.32084
.890	19.613	.01946	1.06187	.10329	-.08103	-.00342	-.00235	-.01209	.96540	.45366	2.12870
.890	21.642	.02227	1.13943	.10686	-.07028	-.00462	-.00371	-.01062	1.01879	.51921	1.96220
.890	22.536	.02061	1.13116	.10713	-.04847	-.00482	-.00557	-.00051	1.00373	.53248	1.88501

RUN NO. 41/ 0

WACH	ALPHA	BETA	CN	CA	CLM	COL	CYN	CY	CL	CD	L/D
.900	-1.946	.00468	-.04318	.08345	-.01737	-.00283	.00147	-.00439	-.04026	.08490	-.47423
.901	.068	.00795	.07335	.08575	-.02336	-.00241	.00147	-.01119	.07043	.08584	.82074
.901	4.398	.01133	.26874	.08811	-.01970	-.00447	.00021	-.01034	.26119	.10846	2.40823
.900	6.546	.01092	.38191	.08951	-.03026	-.00572	-.00030	-.00848	.36910	.13346	2.76575
.901	8.609	.01049	.48753	.09370	-.04426	-.00641	-.00073	-.00721	.46781	.16690	2.80290
.900	10.879	.01096	.62307	.09708	-.06230	-.00666	-.00074	-.00700	.59355	.21293	2.78758
.900	13.030	.01320	.74336	.10239	-.07828	-.00449	-.00270	-.00521	.70115	.26736	2.62235
.999	15.209	.01981	.87614	.10664	-.09490	-.00555	-.00129	-.01013	.81748	.33275	2.45670
.999	17.383	.01683	.99797	.10962	-.10398	-.00520	-.00102	-.01201	.91296	.40068	2.27833
.999	19.548	.02015	1.08993	.11239	-.10311	-.00463	-.00134	-.01365	.98941	.47056	2.10261
.999	21.665	.02405	1.15313	.11582	-.08863	-.00459	-.00349	-.01164	1.02966	.53609	1.91783
.999	22.615	.02391	1.16985	.12040	-.07489	-.00685	-.00407	-.00981	1.02991	.59846	1.84091

LA46 TABULATED SOURCE DATA

LA-46 6-PT TPT 640 RI-0495/139 CR6 SPLIT ELEVON

(RM1001)

PAGE 3

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
 ELV-LI = .000 ELV-RI = .000
 ELV-RO = .000 SDFLAP = .000
 SPOERK = 29.000 AIRLON = .000
 ELEVTR = .000

RUN NO. 31/ 0

WACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.920	-2.094	.00597	-.04994	.09219	-.01402	.00114	.00219	-.01149	-.04654	.09395	-.49534
.921	.042	.00593	.06903	.09349	-.02279	.00066	.00222	-.01463	.06492	.09358	.72099
.920	2.259	.00592	.16271	.09431	-.02395	-.00197	.00139	-.01243	.17445	.10144	1.76316
.920	4.426	.01063	.27004	.09485	-.02201	-.00482	.00027	-.00971	.26993	.11603	2.32630
.920	6.593	.01291	.39798	.09739	-.03659	-.00436	-.00047	-.00943	.34419	.14234	2.69444
.919	8.744	.01148	.51119	.09964	-.05324	-.00609	-.00046	-.00934	.49009	.17824	2.74082
.920	10.906	.01143	.63695	.10249	-.07127	-.00590	-.00069	-.00799	.60594	.22154	2.73532
.919	13.044	.01666	.76515	.10696	-.08423	-.00465	-.00312	-.00493	.72107	.27740	2.59939
.919	15.243	.01607	.90641	.11133	-.10792	-.00524	-.00122	-.01027	.84540	.34642	2.44039
.914	17.421	.01868	1.01920	.11371	-.11954	-.00507	-.00171	-.01125	.93840	.41364	2.26466
.920	19.596	.02109	1.12040	.11697	-.11940	-.00474	-.00171	-.01355	1.01636	.44574	2.09222
.919	21.706	.02669	1.16920	.12359	-.09935	-.00333	-.00224	-.01716	1.34099	.54725	1.90149
.920	22.615	.02410	1.14419	.12641	-.04911	-.00633	-.00361	-.01094	1.04423	.57359	1.42744

RUN NO. 21/ 0

WACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.949	-2.103	.00075	-.06399	.10847	-.00563	-.00384	.00254	-.00424	-.03966	.11073	-.53476
.950	.074	.00399	.00537	.11061	-.01432	-.00344	.00234	-.01025	.07042	.11069	.54543
.951	2.264	.00590	.14849	.10959	-.03210	-.00340	.00214	-.01133	.19401	.11695	1.57343
.950	4.449	.00725	.31414	.10796	-.04447	-.00244	.00230	-.01240	.30482	.13201	2.37914
.949	6.628	.01077	.42425	.10752	-.05146	-.00241	.00143	-.01232	.47001	.15377	2.62569
.949	8.747	.00813	.54446	.10445	-.06769	-.00344	.00106	-.00956	.52154	.19077	2.73393
.944	10.951	.00793	.66740	.11033	-.04596	-.00377	.00040	-.00907	.63464	.23514	2.69471
.952	13.153	.00944	.80111	.11530	-.10204	-.00419	.00012	-.00957	.75346	.29457	2.55916
.951	15.320	.01336	.93445	.11951	-.12942	-.00370	.00030	-.01379	.87332	.36332	2.47534
.951	17.499	.01426	1.06643	.12446	-.15269	-.00341	-.00172	-.01032	.97953	.43975	2.22744
.949	19.647	.02236	1.15561	.12451	-.14429	-.00390	-.00255	-.01159	1.04643	.50590	2.06444
.951	21.833	.04637	1.24948	.13144	-.12432	-.00090	-.00614	-.02195	1.11100	.54760	1.49074
.950	22.756	.04197	1.24473	.13542	-.09996	-.01142	-.01262	-.01006	1.09564	.67396	1.40416

LA48 TABULATED SOURCE DATA

LA-48 8-PT TPT 660 RI-0696/136 CR8 SPLIT ELEVON

(RMI0001)

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
 ELV-L1 = .000 ELV-R1 = .000
 ELV-R0 = .000 BMLAP = .000
 SPOSK = 25.000 AIRCON = .000
 ELEVTR = .000

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.979	-2.136	.00244	-.07426	.12732	.00590	-.00454	.00170	-.00702	-.00949	.13000	-.53451
.980	.111	.00646	.05332	.13006	-.01051	-.00483	.00161	-.00993	.05306	.13019	.40759
.980	2.155	.00876	.17890	.12939	.02644	-.00465	.00122	-.01054	.17390	.13622	1.27589
.979	4.476	.00965	.31666	.12735	-.04454	-.00349	.00135	-.01164	.30575	.15170	2.01593
.979	6.711	.00926	.43654	.12791	-.05647	-.00445	.00116	-.01042	.42062	.17429	2.35927
.979	8.915	.00762	.56134	.13100	-.07517	-.00446	.00081	-.00951	.53463	.21547	2.49122
.982	11.033	.00451	.69328	.13653	-.09611	-.00349	.00061	-.00963	.65395	.26464	2.43429
.980	13.122	.01709	.82343	.14090	-.11425	-.00367	-.00127	-.01090	.76995	.32416	2.37519
.981	15.420	.02231	.96560	.14601	-.13724	-.00392	-.00263	-.01090	.89202	.39790	2.24057
.980	17.658	.01356	1.09237	.14934	-.15103	-.00476	-.00088	-.00857	.99559	.47370	2.10172
.979	19.725	.01219	1.21139	.15084	-.16407	-.00529	-.00049	-.00875	1.09940	.55084	1.97771

RUN NO. 11/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
1.079	-2.103	.00456	-.07114	.14430	.00983	-.00402	.00205	-.00932	-.06584	.14641	-.44847
1.081	.135	.00900	.05536	.14465	-.00906	-.00414	.00169	-.01093	.05504	.14479	.34017
1.080	2.239	.00947	.19149	.14579	-.02702	-.00429	.00137	-.01134	.17565	.15276	1.14984
1.079	4.469	.01057	.31240	.14823	-.04696	-.00374	.00176	-.01303	.29990	.17212	1.74239
1.080	6.799	.00990	.43939	.14923	-.06224	-.00390	.00191	-.01242	.41764	.20001	2.04432
1.078	8.890	.00944	.55211	.15221	-.08041	-.00372	.00127	-.01040	.52200	.23562	2.21544
1.081	11.144	.01062	.68316	.15291	-.09790	-.00376	.00031	-.00945	.64074	.24201	2.27204
1.080	13.303	.01033	.81072	.15473	-.11700	-.00432	-.00001	-.00773	.75336	.33713	2.23460
1.080	15.530	.01105	.93173	.15562	-.13086	-.00456	-.00011	-.00803	.85805	.39939	2.14337
1.077	18.006	.01225	1.07019	.15939	-.14995	-.00460	.00016	-.00992	.96490	.44240	2.00769

RUN NO. 1/ 0

LA48 TABULATED SOURCE DATA

LA-48 8-PT TPT 600 RI-0398/139 CR8 SPLIT ELEVON

(RM1002)

PAGE 3

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
ELV-LI = -10.000 ELV-RI = -10.000
ELV-RO = .000 BOFLAP = .000
SPOERK = 25.000

RUN NO. 72/ 0

WACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.999	-1.983	.00437	-1.1260	.06141	.03721	-.00074	.00091	-.00940	-.14034	.06834	-2.11902
.999	.224	.00331	-.04103	.06346	.03641	-.00116	.00071	-.00945	-.04130	.06330	-.63249
.999	2.203	.00602	.03303	.06192	.03485	-.00091	.00033	-.01090	.03063	.06391	.79216
.999	4.242	.00701	.13262	.03671	.03234	-.00113	.00013	-.01061	.14901	.06745	2.14151
.999	6.749	.00609	.29132	.04496	.03121	-.00174	-.00077	-.00936	.27429	.07774	3.52440
.999	8.344	.00386	.37444	.03341	.03193	-.00201	-.00034	-.00760	.36496	.09090	4.01502
.999	10.340	.00325	.48962	.03402	.02126	-.00092	.00036	-.00945	.47440	.12694	3.73724
.999	12.661	.00442	.60032	.04212	.01147	-.00156	-.00014	-.00677	.57669	.17273	2.33943
.999	14.671	.00446	.73044	.04416	.00099	-.00244	-.00033	-.00573	.69547	.22743	3.03434
.997	17.277	.00616	.86106	.05470	.00093	-.00140	-.00057	-.00771	.80596	.30796	2.61713
.996	19.043	.00844	.97208	.05392	-.01491	-.00076	-.00042	-.00746	.90102	.36440	2.44311
.999	21.023	.00746	1.07740	.03206	-.01409	-.00042	-.00071	-.00990	.94700	.43511	2.26439
.991	21.992	.00445	1.13037	.05104	-.01234	-.00049	-.00091	-.01036	1.02919	.47071	2.14649

RUN NO. 62/ 0

WACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.999	-2.162	.00275	-1.1946	.06804	.04473	-.00204	.00163	-.00756	-.13545	.07197	-2.16554
.999	.095	.00403	-.04463	.06411	.04242	-.00215	.00123	-.00934	-.04476	.06403	-.71674
.999	2.263	.00819	.06439	.06640	.03903	-.00223	.00054	-.00949	.05191	.06490	.89460
.999	4.441	.00446	.14392	.06254	.03376	-.00240	.00047	-.01074	.17432	.07663	2.32954
.999	6.343	.00435	.27744	.06314	.02960	-.00235	.00064	-.01023	.26920	.09390	2.47929
.999	8.377	.00795	.34931	.06564	.02445	-.00237	.00030	-.00974	.37516	.12371	3.44944
.999	10.717	.00725	.46900	.07042	.02114	-.00131	.00030	-.00910	.46635	.16713	2.91229
.999	12.740	.00437	.59130	.07374	.01496	-.00133	.00046	-.00970	.56044	.20232	2.77031
.994	13.012	.00924	.71920	.07749	.00728	-.00241	.00105	-.00619	.67454	.26114	2.54324
.997	17.370	.01342	.86660	.04272	-.01463	-.00099	.00106	-.01097	.80240	.33664	2.34445
.999	19.149	.01653	.95412	.04571	-.01656	-.00031	.00166	-.01211	.87294	.39456	2.21245
.996	21.908	.01941	1.06233	.04411	-.00240	-.00046	.00349	-.00949	.95201	.47954	1.94510
.999	22.542	.02034	1.04971	.04916	.00743	-.00271	.00445	-.00917	.93363	.49211	1.93326

ORIGINAL PAGE IS
OF POOR QUALITY

LA46 TABULATED SOURCE DATA

PAGE 6

LA-46 8-PT TWT 800 RI-0000/139 CDS SPLIT ELEVON

(RM1002)

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
 ELV-LI = -10.000 ELV-RI = -10.000
 ELV-RO = .000 BOPAP = .000
 SPOZER = 25.000

WCH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/O
.000	-2.143	.00434	-1.14091	.07134	.04213	-.00433	.00122	-.00761	-.14814	.07686	-1.90142
.050	.094	.00732	-.03349	.07335	.03702	-.00433	.00079	-.00901	-.03396	.07332	-.48197
.100	2.192	.00947	.04363	.07269	.02942	-.00379	.00220	-.00920	.09261	.07609	1.09433
.150	4.476	.01099	.20442	.07325	.02249	-.00478	.00116	-.01012	.19408	.08499	2.22607
.200	6.220	.01023	.29009	.07649	.02043	-.00492	.00016	-.00941	.24007	.10790	2.60325
.250	8.893	.00633	.40697	.08039	.01763	-.00629	-.00336	-.00676	.39014	.14099	2.76719
.300	10.436	.00433	.50817	.08394	.01320	-.00549	-.00071	-.00375	.44332	.17794	2.71562
.350	13.707	.01109	.62070	.08493	.00341	-.00336	-.00147	-.00347	.54491	.22369	2.59184
.400	15.044	.01345	.73076	.09132	-.00463	-.00364	-.00124	-.00494	.64142	.27434	2.44936
.450	17.240	.01596	.83193	.09347	-.01431	-.00443	-.00123	-.01115	.74485	.34424	2.27907
.500	19.439	.01949	.92881	.09439	-.02249	-.00295	-.00224	-.01203	.87494	.41369	2.11305
.550	21.567	.02247	1.03449	.09974	-.02721	-.00412	-.00343	-.01162	.94400	.48034	1.96311
.600	22.498	.02334	1.06731	.10039	-.00391	-.00672	-.00352	-.00316	.94766	.50115	1.90094

WCH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/O
.000	-2.139	.00423	-.12396	.04467	.03314	-.00412	.00130	-.00794	-.12274	.04931	-1.37432
.050	.094	.00790	-.00045	.04705	.02346	-.00396	.00116	-.00949	-.00053	.04705	-.00614
.100	2.175	.00931	.11208	.04668	.01747	-.00140	.00147	-.01237	.10471	.09047	1.19621
.150	4.346	.01116	.20448	.04977	.02199	-.00239	.00116	-.01375	.19717	.10401	1.89369
.200	6.532	.01035	.31090	.09120	.01636	-.00444	.00044	-.01034	.30447	.12666	2.40341
.250	8.666	.00793	.41950	.09313	.00761	-.00364	.00070	-.00349	.39039	.15710	2.54223
.300	10.436	.01026	.54033	.09653	-.00444	-.00634	-.00026	-.00476	.51262	.19700	2.60207
.350	13.026	.01543	.64907	.10343	-.01590	-.00339	-.00193	-.00767	.62444	.24370	2.49431
.400	15.137	.01439	.74920	.10346	-.02609	-.00377	.00005	-.01303	.71339	.30794	2.37643
.450	17.313	.01716	.84155	.10824	-.03626	-.00433	-.00076	-.01309	.80994	.36340	2.22643
.500	19.477	.02043	.94972	.10907	-.04027	-.00344	-.00146	-.01431	.89672	.43243	2.07177
.550	21.625	.02396	1.07033	.11212	-.03372	-.00440	-.00332	-.01204	.95346	.49475	1.91293
.600	22.381	.02341	1.08193	.11247	-.02333	-.00601	-.00334	-.01153	.96496	.52311	1.84466

LA66 TABULATED SOURCE DATA

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LA-48 8-PT TPT 600 RI-0699/136 CRD SPLIT ELEVON

(RM1002)

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
ELV-LI = -10.000 ELV-RI = -10.000
ELV-RO = .000 EDPLAP = .000
SPOERK = 29.000

RUN NO. 32/ 0

WAOI	ALPHA	BETA	CN	CA	CLM	COL	CYN	CY	CL	CD	L/D
.980	-2.129	.00007	-.12375	.09249	.03470	-.00323	.00213	-.00634	-.12021	.09702	-1.23906
.981	.051	.00442	.00393	.09341	.02071	-.00343	.00235	-.01133	.00394	.09341	.04027
.982	2.235	.00712	.11939	.09475	.01429	-.00161	.00260	-.01375	.11560	.09833	1.16390
.983	4.348	.00173	.21139	.09390	.02245	-.00362	.00279	-.01275	.00344	.11179	1.41996
.984	6.556	.00793	.32791	.09670	.01337	-.00417	.00132	-.01117	.01462	.13390	2.35690
.919	4.733	.00799	.43703	.09990	.00364	-.00642	.00120	-.01003	.41697	.16470	2.53108
.920	10.475	.00819	.59516	.10231	-.01475	-.00619	.00093	-.01030	.32480	.20394	2.56727
.919	13.040	.01566	.67129	.10423	-.02390	-.00341	-.00201	-.00742	.63746	.25370	2.49193
.919	15.230	.01480	.79994	.10762	-.03476	-.00310	.00076	-.01493	.74361	.31399	2.36927
.920	17.347	.01606	.91374	.11067	-.03321	-.00416	-.00264	-.01323	.93491	.37967	2.21541
.919	19.335	.01996	1.01404	.11332	-.03454	-.00425	-.00122	-.01404	.91779	.44594	2.09933
.919	21.679	.02409	1.08414	.11690	-.04494	-.00393	-.00196	-.01570	.96910	.51032	1.49703
.919	22.620	.02227	1.11261	.11747	-.03645	-.00624	-.00245	-.01163	.99175	.53633	1.42942

RUN NO. 22/ 0

WAOI	ALPHA	BETA	CN	CA	CLM	COL	CYN	CY	CL	CD	L/D
.949	-2.110	.00537	-.12656	.10715	.04462	-.00364	.00290	-.01023	-.12233	.11174	-1.09637
.950	.056	.00703	-.00017	.11024	.02699	-.00364	.00241	-.01249	-.00024	.11024	-.00254
.951	2.236	.00714	.13542	.11011	.00964	-.00247	.00275	-.01484	.13097	.11536	1.13539
.952	4.444	.00499	.23341	.10465	.00351	-.00260	.00292	-.01603	.24423	.12796	1.90470
.951	6.612	.00967	.36290	.10614	-.00310	-.00332	.00212	-.01439	.34764	.14916	2.33067
.950	8.761	.00920	.44304	.10901	-.01932	-.00362	.00179	-.01291	.43595	.14033	2.55619
.949	10.937	.00941	.60724	.10932	-.03539	-.00359	.00203	-.01322	.57544	.22276	2.59323
.949	13.124	.01143	.72943	.11105	-.04694	-.00334	.00042	-.01079	.69515	.27391	2.57225
.949	15.293	.01644	.85129	.11379	-.06614	-.00225	-.00074	-.01339	.79112	.33431	2.36642
.950	17.463	.02090	.97322	.11413	-.08324	-.00370	-.00229	-.01087	.90291	.40474	2.20614
.949	19.633	.02342	1.06994	.12130	-.04292	-.00299	-.00276	-.01224	.96594	.47374	2.04114
.951	21.809	.04402	1.14864	.12779	-.06610	-.00122	-.00653	-.02227	1.03756	.55242	1.47594
.949	22.727	.04542	1.14349	.12993	-.03135	-.00635	-.00766	-.01631	1.04216	.57630	1.40437

ORIGINAL PAGE IS
OF POOR QUALITY

LA48 TABULATED SOURCE DATA

PAGE 8

LA-48 8-FT TPT 680 KI-0898/139 ORG SPLIT ELEVON

(RM1002)

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
ELV-LI = -10.000 ELV-RI = -10.000
ELV-RO = .000 SDFLAP = .000
SPDRK = 23.000

RUN NO. 12/ 0

WACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.979	-2.179	.00371	-.13911	.12496	.03356	-.00363	.00237	-.01004	-.13426	.13016	-1.03.32
.981	.006	.00801	-.00333	.12912	.03314	-.00380	.00235	-.01336	-.00434	.12912	-.06461
.981	2.179	.00922	.12882	.12983	.01319	-.00349	.00235	-.01415	.12143	.13355	.91219
.990	4.577	.00916	.26379	.12763	.00032	-.00274	.00311	-.01659	.23276	.14827	1.70472
.979	6.710	.00911	.37937	.12816	-.01141	-.00372	.00221	-.01306	.36081	.17149	2.10399
.979	8.149	.00770	.50342	.13133	-.03131	-.00385	.00220	-.01275	.47920	.20751	2.30927
.979	10.967	.01172	.63142	.13377	-.05284	-.00353	.00160	-.01121	.59457	.25079	2.37079
.981	13.165	.01759	.77115	.13717	-.07370	-.00348	-.00093	-.01140	.71930	.30978	2.32264
.979	15.425	.02165	.93714	.14014	-.09485	-.00312	-.00160	-.01290	.82755	.37372	2.21439
.990	17.624	.01303	1.07851	.14528	-.09158	-.00392	.00062	-.01261	.91719	.44381	2.06663

RUN NO. 2/ 0

WACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
1.079	-2.166	.00578	-.13095	.14674	.03283	-.00321	.00221	-.01084	-.12521	.15158	-.92601
1.090	.031	.00948	-.00123	.14784	.03277	-.00332	.00192	-.01268	-.00131	.14784	-.00885
1.079	2.262	.01199	.13236	.15011	.01080	-.00308	.00182	-.01425	.12633	.15222	.81387
1.079	4.324	.01173	.26004	.15169	-.00336	-.00215	.00245	-.01596	.24727	.17172	1.43993
1.079	6.741	.01105	.37896	.15347	-.02066	-.00301	.00231	-.01907	.35833	.19689	1.81992
1.079	8.911	.01077	.50336	.15376	-.03926	-.00287	.00139	-.01215	.47347	.22988	2.05967
1.079	11.184	.01113	.63316	.15257	-.05738	-.00310	.00079	-.01065	.59154	.27248	2.17092
1.090	13.270	.01144	.75343	.15208	-.07428	-.00380	.00021	-.00922	.69840	.32097	2.17592
1.090	15.607	.01305	.87835	.15182	-.08659	-.00318	-.00006	-.00971	.80512	.38253	2.10473
1.090	17.946	.01423	.97961	.15637	-.09279	-.00365	-.00008	-.01067	.88611	.44597	1.98692



LA48 TABULATED SOURCE DATA

LA-48 8-FT TPT 680 RI-0898/139 CR8 SPLIT ELEVON

(RM1003)

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
 ELV-LI = -20.000 ELV-RI = -20.000
 ELV-RO = .000 SDFAP = .000
 SPOBRK = 25.000

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.799	-1.899	.00449	-.22284	.06975	.07727	-.00102	.00104	-.00967	-.22041	.07709	-2.89901
.799	-.043	.00642	-.13958	.07157	.07601	-.00103	.00053	-.01091	-.13953	.07166	-1.93270
.800	2.071	.00723	-.03453	.07046	.07411	-.00092	.00027	-.01131	-.03705	.06917	-.53566
.799	4.267	.00780	.07291	.06486	.07197	-.00094	-.00055	-.01121	.06785	.07013	.96756
.799	6.223	.00763	.16619	.05669	.07259	-.00130	-.00026	-.00026	.15896	.07436	2.13767
.799	8.415	.00685	.27493	.04690	.07312	-.00159	-.00040	-.00487	.26324	.08574	3.09350
.799	10.632	.00527	.39993	.04132	.06767	-.00154	-.00065	-.00596	.38544	.11440	3.36934
.799	12.806	.00550	.52423	.04593	.06935	-.00167	-.00021	-.00757	.50078	.16171	3.09684
.799	14.864	.00609	.64099	.04731	.06864	-.00131	-.00046	-.00780	.60813	.20804	2.92319
.798	16.863	.00634	.73590	.05816	.06045	-.00126	-.00045	-.00830	.68730	.26910	2.55404
.797	18.794	.00714	.85906	.05753	.03231	-.00053	-.00070	-.00490	.79471	.33125	2.39915
.799	20.902	.00762	.98435	.05542	.03276	-.00108	-.00078	-.00955	.89980	.40297	2.23294
.799	22.037	.00822	1.04422	.05496	.03313	-.00134	-.00085	-.01039	.94731	.44274	2.13967

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.799	-2.077	.00403	-.22298	.07561	.08369	-.00212	.00123	-.00764	-.22309	.08375	-2.66376
.801	.019	.00744	-.12259	.07775	.07996	-.00238	.00084	-.00975	-.12241	.07771	-1.97530
.800	2.131	.00919	-.01411	.07639	.07551	-.00256	.00074	-.00907	-.01694	.07582	-.22343
.799	4.337	.00981	.10645	.07213	.07902	-.00287	-.00013	-.00920	.10069	.07994	1.25897
.799	6.448	.00980	.22238	.07166	.06441	-.00299	.00003	-.00973	.21282	.09619	2.21378
.799	8.289	.00814	.37323	.07444	.05452	-.00314	-.00022	-.00740	.35634	.13371	2.56507
.799	10.137	.00780	.45937	.07766	.04755	-.00265	-.00029	-.00686	.43609	.16255	2.68282
.799	13.449	.00949	.57704	.08169	.04836	-.00209	-.00110	-.00620	.54221	.21365	2.53782
.799	14.944	.00983	.64758	.08457	.04780	-.00320	-.00128	-.00607	.60346	.24871	2.42802
.799	17.196	.01375	.79489	.08493	.02773	-.00324	-.00129	-.01017	.73307	.31995	2.29119
.797	19.697	.01769	.89891	.09223	.02849	-.00019	-.00177	-.01305	.81529	.38967	2.09225
.799	21.437	.01979	.96927	.09394	.03699	-.00079	-.00318	-.01119	.86789	.44168	1.96494
.799	22.699	.02108	.99576	.09547	.03473	-.00170	-.00427	-.00949	.98179	.47234	1.86683

ORIGINAL PAGE IS
 OF POOR QUALITY

LA48 TABULATED SOURCE DATA

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LA-48 8-FT TPT 690 RI-0898/139 CRB SPLIT ELEVON (RM1003)

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
ELV-LI = -20.000 ELV-RI = -20.000
ELV-RO = .000 SDFLAP = .000
SPDRK = 25.000

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.90	-2.126	.00404	-22397	.09068	.08494	-.00461	.00094	-.00620	-.22082	.08893	-2.48301
.91	.033	.00789	-10798	.09309	.07779	-.00469	.00037	-.00426	-.10796	.08299	-1.30077
.92	2.199	.01017	.01490	.08181	.06889	-.00325	-.00022	-.00459	-.01176	.08232	.14287
.93	4.468	.01060	.14449	.09081	.06022	-.00353	-.00061	-.00794	.13777	.09161	1.90382
.94	6.312	.01000	.29065	.08402	.03397	-.00376	-.00025	-.00438	.23950	.11190	2.14023
.95	8.845	.00979	.36473	.08645	.04461	-.00624	-.00032	-.00678	.34759	.14029	2.47764
.96	10.891	.00969	.48683	.09105	.03545	-.00617	-.00093	-.00647	.46046	.18139	2.54064
.97	12.996	.01039	.58153	.09504	.03288	-.00593	-.00118	-.00613	.54327	.22338	2.44098
.98	15.397	.01274	.69424	.10027	.02971	-.00433	-.00075	-.00975	.64270	.28099	2.28725
.99	17.207	.01499	.78407	.10374	.02236	-.00418	-.00105	-.01107	.71829	.33105	2.16973
.99	19.335	.01916	.88332	.10493	.02039	-.00309	-.00200	-.01249	.79875	.39147	2.04038
.99	21.432	.02152	.97345	.10710	.02788	-.00385	-.00316	-.01153	.86684	.45570	1.90224
.99	22.468	.02345	.99257	.10793	.04005	-.00379	-.00483	-.00456	.87598	.47907	1.82850

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.90	-2.190	.00499	-21942	.09185	.08872	-.00508	.00096	-.00714	-.21215	.10003	-2.12043
.91	.004	.00840	-.09078	.09422	.07666	-.00477	.00045	-.00432	-.09077	.09423	-.96325
.92	2.134	.01016	.03718	.09377	.06401	-.00441	.00017	-.00918	.03363	.09510	.35361
.93	4.345	.01114	.15113	.09492	.05956	-.00362	.00035	-.01060	.14331	.10599	1.35398
.94	6.317	.01099	.27119	.09734	.05008	-.00618	-.00017	-.00994	.25839	.12749	2.02676
.95	8.691	.01064	.39317	.10187	.03416	-.00718	-.00019	-.00462	.37329	.16705	2.35237
.96	10.841	.01071	.50778	.10567	.02297	-.00664	-.00032	-.00934	.47882	.19929	2.40264
.97	12.993	.01162	.60865	.10793	.02015	-.00603	-.00106	-.00701	.56880	.24202	2.35023
.98	15.129	.01470	.70882	.11172	.01556	-.00345	.00009	-.01329	.63316	.29233	2.23433
.99	17.288	.01688	.81151	.11419	.00791	-.00405	-.00079	-.01276	.74091	.35019	2.11572
.99	19.444	.02135	.92104	.11721	.00448	-.00289	-.00115	-.01589	.82949	.41713	1.98858
.99	21.600	.02403	1.00329	.12006	.01042	-.00392	-.00279	-.01356	.89050	.48171	1.84862
.99	22.534	.02484	1.02832	.11943	.01948	-.00307	-.00285	-.01423	.90202	.50395	1.78990

LA48 TABULATED SOURCE DATA

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LA-48 8-FT TPT 640 RI-0898/139 CR8 SPLIT ELEVON

(RH1003)

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
ELV-LI = -20.000 ELV-RI = -20.000
ELV-RO = .000 BOFLAP = .000
SPORER = 25.000

RUN NO. 33/ 0

WACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.920	-2.147	.00449	-2.1196	.09447	.09160	-.00344	.00121	-.00739	-.20809	.10840	-1.95570
.921	.012	.00735	-.07919	.10121	.07575	-.00545	.00104	-.00926	-.07921	.10119	-.74272
.920	2.211	.00942	.04763	.10097	.06209	-.00390	.00096	-.01109	.04370	.10273	.42540
.920	4.369	.01139	.16154	.10208	.05472	-.00425	.00092	-.01230	.15330	.11409	1.34374
.920	6.553	.01036	.28169	.10334	.04984	-.00559	.00052	-.01029	.26903	.13481	1.94839
.919	8.705	.01026	.40212	.10665	.03173	-.00714	.00054	-.01029	.34134	.16628	2.29332
.919	10.891	.01019	.52189	.11032	.01731	-.00617	.00052	-.01024	.49148	.20642	2.37640
.920	13.039	.01270	.63389	.11280	.00976	-.00531	-.00179	-.00762	.59210	.25290	2.34130
.919	15.209	.01536	.73709	.11627	.00200	-.00323	.00069	-.01534	.69077	.30557	2.22794
.919	17.343	.01693	.84533	.11871	.00831	-.00367	-.00116	-.01434	.77151	.36531	2.11194
.919	19.503	.02020	.94643	.12166	-.01015	-.00323	-.00074	-.01568	.85151	.43065	1.97728
.919	21.634	.02506	1.02212	.12331	-.00249	-.00303	-.00199	-.01659	.90466	.49145	1.84079
.917	22.615	.02414	1.09344	.12394	.00735	-.00539	-.00296	-.01302	.92211	.51817	1.77954

RUN NO. 23/ 0

WACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.930	-2.147	.00498	-2.1469	.11076	.10682	-.00429	.00162	-.00491	-.21039	.11473	-1.77200
.931	-.069	.00869	-.04347	.11290	.04453	-.00452	.00164	-.01197	-.04333	.11300	-.73741
.931	2.242	.01109	.06230	.11372	.06267	-.00417	.00178	-.01431	.03781	.11607	.49802
.930	4.404	.01133	.14468	.11347	.05135	-.00396	.00159	-.01347	.17542	.12732	1.37796
.949	6.590	.01137	.30430	.11476	.03959	-.00399	.00149	-.01390	.24914	.14897	1.94223
.949	8.761	.00964	.43351	.11638	.02165	-.00445	.00126	-.01170	.41072	.18105	2.25849
.949	10.933	.00938	.56804	.11896	.00709	-.00369	.00164	-.01279	.53313	.22435	2.27633
.930	13.105	.01212	.69259	.11955	-.01062	-.00335	.00029	-.01036	.63771	.27121	2.35134
.932	15.285	.02197	.79650	.12324	-.02327	-.00249	-.00129	-.01449	.73593	.32846	2.33754
.930	17.422	.01922	.89579	.12595	-.03390	-.00209	-.00069	-.01426	.81702	.38927	2.10424
.930	19.625	.02403	1.01098	.12991	-.04003	-.00161	-.00236	-.01337	.90982	.46191	1.96710
.949	21.797	.04639	1.10259	.13461	-.02044	-.00087	-.00615	-.02202	.97378	.53440	1.82220
.930	22.700	.04729	1.13208	.13490	-.01372	-.00435	-.00361	-.02466	.99232	.56133	1.76779

REPRODUCED FROM
ORIGINAL DATA

LA48 TABULATED SOURCE DATA

PAGE 12

LA-48 8-PT TPT 880 RI-0899/139 CRB SPLIT ELEVON

(RH1003)

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
ELV-LI = -20.000 ELV-RI = -20.000
ELV-RO = .000 BDPLAP = .000
SPOBK = 25.000

RUN NO. 13/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.979	-2.141	.00590	-.20472	.12847	.10644	-.00400	.00184	-.01010	-.20377	.13617	-1.49842
.980	-.031	.00894	-.08116	.13294	.08675	-.00419	.00199	-.01181	-.06109	.13294	-.62977
.980	2.232	.01127	.08228	.13493	.06447	-.00416	.00195	-.01332	.03699	.13845	.41644
.980	4.399	.01042	.18754	.13658	.05057	-.00378	.00177	-.01354	.17634	.19053	1.17277
.979	6.736	.00976	.32425	.13790	.03180	-.00395	.00176	-.01305	.30583	.17494	1.74785
.979	9.729	.00906	.44492	.14288	.01094	-.00429	.00169	-.01230	.42194	.20934	2.01593
.981	10.991	.00882	.59732	.14725	-.01351	-.00411	.00162	-.01195	.54447	.25673	2.19807
.982	13.100	.01756	.72243	.14898	-.03713	-.00397	-.00150	-.00966	.66986	.30845	2.16991
.980	15.294	.02215	.84279	.14811	-.04734	-.00275	-.00162	-.01319	.77348	.36316	2.11929
.980	17.663	.01266	.95670	.15153	-.05043	-.00348	.00059	-.01223	.85564	.43462	1.99170

RUN NO. 3/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
1.091	-2.239	.00796	-.19831	.15680	.10051	-.00318	.00137	-.00993	-.19304	.16427	-1.17512
1.091	-.031	.01049	-.08913	.15802	.07970	-.00334	.00164	-.01300	-.06904	.15806	-.43640
1.090	2.236	.01309	.06959	.16020	.05643	-.00315	.00181	-.01501	.06329	.16279	.38875
1.090	4.477	.01232	.19432	.16295	.03868	-.00309	.00202	-.01511	.18499	.17793	1.03970
1.091	6.823	.01187	.32073	.16548	.01930	-.00315	.00211	-.01507	.29950	.20137	1.49737
1.090	9.804	.01082	.44905	.16858	-.00285	-.00365	.00171	-.01313	.41794	.23542	1.77531
1.079	11.101	.01125	.59692	.16718	-.02568	-.00355	.00111	-.01172	.54375	.27705	1.96261
1.090	13.232	.01207	.71092	.16333	-.04336	-.00357	.00032	-.01002	.85457	.32170	2.03474
1.079	15.354	.01292	.82964	.16076	-.05362	-.00311	.00724	-.01052	.75765	.37403	2.02567
1.079	17.675	.01377	.95121	.16237	-.05795	-.00280	.00025	-.01131	.83789	.43763	1.91463

LA48 TABULATED SOURCE DATA

LA-45 8-FT TPT 640 RI-0498/139 CRB SPLIT ELEVEN

(RH1004)

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
ELV-LI = -30.000 ELV-RI = -30.000
ELV-RO = .000 SDPLAP = .000
SPDRK = 25.000

RUN NO. 74/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.000	-2.151	.00394	-2.7880	.04523	.09898	-.00253	.00037	-.00684	-.27516	.09377	-2.87300
.001	-.033	.00625	-.17994	.04424	.09480	-.00236	-.00007	-.00984	-.17990	.04440	-2.93501
.002	.173	.00664	-.17292	.04403	.09433	-.00227	-.00020	-.00903	-.17319	.04733	-1.97866
.003	2.045	.00740	-.04166	.04730	.09280	-.00290	-.00095	-.00945	-.04472	.04433	-1.00464
.004	4.139	.00790	.02186	.04235	.09112	-.00291	-.00122	-.00770	.01585	.04371	.19444
.005	5.445	.00780	.10407	.04506	.09136	-.00330	-.00142	-.00715	.09574	.04626	1.11033
.006	8.359	.00669	.22731	.04351	.09282	-.00344	-.00169	-.00476	.21566	.09344	2.49113
.007	10.325	.00599	.33541	.04522	.09496	-.00341	-.00163	-.00396	.32730	.11550	2.77325
.008	12.539	.00531	.45807	.04617	.09241	-.00430	-.00151	-.00769	.43374	.15255	2.71873
.009	14.395	.00537	.56921	.04322	.09330	-.00416	-.00157	-.00335	.53547	.20333	2.63354
.010	16.748	.00580	.67732	.04426	.09057	-.00217	-.00156	-.00715	.62719	.26629	2.35527
.011	18.664	.00760	.79226	.04326	.06170	-.00092	-.00117	-.00810	.72715	.32294	2.23166
.012	20.924	.00737	.91200	.04341	.06643	-.00036	-.00034	-.01037	.82536	.39462	2.00409
.013	21.994	.00418	.96926	.04426	.06932	-.00079	-.00064	-.01793	.87791	.43146	2.01663

RUN NO. 84/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.000	-2.293	.00410	-.29434	.04764	.10995	-.00243	.00145	-.00445	-.29064	.09935	-2.92354
.001	.084	.00179	-.16935	.04374	.11266	-.00211	.00176	-.00919	-.16919	.04552	-1.84092
.002	2.103	.00940	-.06611	.04531	.09429	-.00249	.00034	-.01070	-.06931	.04602	-.00573
.003	4.326	.00339	.01979	.04479	.07483	-.00271	.00004	-.00943	.04326	.04830	.48990
.004	6.256	.00074	.05961	.04267	.06930	-.00325	.00074	-.00904	.11954	.09949	1.40403
.005	8.158	.00119	.11124	.04314	.07962	-.00316	-.00024	-.00743	.07154	.12575	2.11226
.006	10.615	.00445	.41556	.04821	.06560	-.00309	-.00020	-.00740	.30237	.16124	2.43405
.007	12.922	.00452	.54072	.04441	.05727	-.00265	-.00035	-.00695	.50762	.20620	2.46144
.008	14.929	.01511	.62797	.04529	.06269	-.00294	-.00139	-.00605	.59223	.25345	2.29362
.009	17.219	.01464	.77494	.04425	.04191	-.00091	-.00195	-.00912	.71116	.32325	2.20002
.010	19.321	.01564	.87377	.04132	.04024	-.00091	-.00174	-.01394	.70103	.35471	2.05619
.011	21.194	.02034	.93295	.04243	.04449	-.00111	-.00312	-.01195	.83241	.43240	1.92424
.012	22.673	.02335	.97190	.04314	.04746	-.00116	-.00453	-.01043	.85547	.47134	1.81506

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OF POOR QUALITY

LA46 TABULATED SOURCE DATA

LA-46 8-FT TPT 880 RI-0898/139 CRB SPLIT ELEVEN

(RH1004)

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
 ELV-LI = -30.000 ELV-RI = -30.000
 ELV-RO = .000 BDFLAP = .000
 SPOERK = 25.000

MACH	ALPHA	BETA	CN	CA	CLM	CSL	CYN	CY	CL	CD	L/D
.900	-2.195	.00396	-.2876	.09238	.11548	-.00408	.00115	-.00705	-.28009	.10341	-2.76652
.950	-.074	.00797	-.16897	.09398	.10508	-.00398	.00073	-.00941	-.16895	.09410	-1.79441
.990	2.155	.01115	-.04429	.09309	.09629	-.00430	.00010	-.01042	-.04776	.09136	-.52283
.990	4.282	.01097	.07631	.09142	.09931	-.00491	-.00018	-.00946	.06928	.09687	.71518
.990	6.481	.01008	.20360	.09147	.07811	-.00546	-.00025	-.00947	.11997	.11387	1.68596
.990	8.753	.00978	.33515	.09379	.06522	-.00599	-.00040	-.00782	.31697	.14369	2.20591
.990	10.799	.01028	.43352	.09751	.05390	-.00538	-.00038	-.00936	.42725	.18068	2.38470
.990	12.990	.01066	.56427	.10372	.04607	-.00434	-.00008	-.00729	.52675	.22735	2.31691
.990	15.203	.01376	.67639	.10740	.03861	-.00444	-.00017	-.00702	.62456	.26102	2.22247
.990	17.200	.01379	.78129	.10875	.02779	-.00503	-.00016	-.01262	.71419	.33492	2.13238
.990	19.355	.01904	.86770	.11076	.02832	-.00592	-.00197	-.01245	.78209	.39180	1.95613
.990	21.465	.02367	.95660	.11234	.03319	-.00374	-.00359	-.01232	.84896	.45507	1.86556
.990	22.445	.02465	.97964	.11457	.04316	-.00431	-.00471	-.01009	.86169	.47992	1.75550

RUN NO. 44/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CSL	CYN	CY	CL	CD	L/D
.900	-2.241	.00491	-.28614	.10322	.12420	-.00399	.00142	-.00946	-.28189	.11433	-2.46555
.950	-.054	.00779	-.17926	.10432	.11109	-.00378	.00098	-.00929	-.15916	.10447	-1.52346
.990	2.124	.01133	-.03272	.10341	.09919	-.00325	.00041	-.01091	-.03653	.10212	-.35770
.990	4.317	.01190	.09420	.10311	.09001	-.00359	.00027	-.01099	.08617	.10991	.78403
.990	6.478	.01104	.21806	.10979	.07693	-.00399	.00012	-.00990	.20482	.12902	1.58750
.990	8.667	.01116	.35078	.10922	.05972	-.00670	-.00037	-.00952	.33032	.16083	2.05386
.990	10.843	.01199	.48214	.11460	.04224	-.00592	-.00058	-.00927	.45198	.20326	2.22364
.990	12.994	.01266	.58546	.11752	.03619	-.00554	-.00145	-.00675	.54409	.24606	2.21121
.990	15.154	.01582	.69490	.12194	.02888	-.00503	-.00118	-.01043	.63879	.29923	2.13475
.990	17.301	.01900	.79448	.12390	.02005	-.00498	-.00217	-.01090	.72181	.35419	2.03792
.990	19.414	.02155	.89622	.12557	.01513	-.00466	-.00142	-.01524	.80419	.41444	1.94044
.990	21.602	.02421	.99096	.12590	.01511	-.00399	-.00298	-.01329	.87501	.48189	1.81579
.990	22.539	.02446	1.01370	.12709	.02175	-.00493	-.00296	-.01373	.89757	.50592	1.75436

RUN NO. 44/ 0

LA48 TABULATED SOURCE DATA

LA-48 9-FT TPT 690 RI-0999/139 CR8 SPLIT ELEVON

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(RH1004)

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
ELV-LI = -30.000 ELV-RI = -30.000
ELV-RO = .000 BDFLAP = .000
SPDRK = 25.000

RUN NO. 34/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CT	CL	CD	L/D
.920	-2.216	.00506	-.24591	.10946	.12946	-.00443	.00155	-.00491	-.24146	.12044	-2.33706
.922	-.021	.00480	-.15467	.11122	.11533	-.00401	.00110	-.01063	-.15463	.11128	-1.34955
.920	2.152	.01119	-.02487	.10975	.10091	-.00367	.00065	-.01129	-.02498	.10874	-.26648
.919	4.328	.01120	.10281	.11076	.09104	-.00427	.00034	-.01101	.09421	.11751	.40174
.920	6.504	.01131	.22677	.11214	.07775	-.00601	.00019	-.01078	.21261	.13715	1.55019
.920	8.688	.01112	.36028	.11596	.06052	-.00676	-.00033	-.00493	.33463	.16905	2.00317
.919	10.866	.01207	.49438	.12131	.03967	-.00558	-.00070	-.00414	.46265	.21233	2.17486
.920	13.022	.01344	.60376	.12390	.02469	-.00519	-.00166	-.00363	.58031	.25676	2.14229
.919	15.146	.01524	.71724	.12815	.01492	-.00536	-.00042	-.01197	.65463	.31156	2.11401
.919	17.325	.01955	.81746	.13017	.00707	-.00476	-.00174	-.01179	.74161	.36770	2.01689
.919	19.471	.02335	.91796	.13234	.00409	-.00337	-.00224	-.01415	.92128	.43094	1.90577
.919	21.619	.02541	.99972	.13339	.00454	-.00350	-.00244	-.01643	.94025	.49234	1.74791
.919	22.544	.02493	1.02623	.13523	.01642	-.00344	-.00321	-.01292	.99560	.51894	1.72570

RUN NO. 24/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CT	CL	CD	L/D
.950	-2.229	.00561	-.28430	.12196	.14210	-.00315	.00160	-.00437	-.27934	.13292	-2.10147
.951	-.029	.00475	-.14966	.12339	.12401	-.00321	.00113	-.01047	-.14960	.12346	-1.21167
.951	2.165	.01075	-.01240	.12234	.10603	-.00330	.00047	-.01132	-.01701	.12179	-.13969
.950	4.380	.01116	.11613	.12278	.09093	-.00363	.00079	-.01142	.10646	.13125	.41111
.949	6.549	.01190	.24934	.12570	.07542	-.00444	.00070	-.01148	.23362	.15335	1.52344
.951	8.752	.01013	.39074	.12014	.05058	-.00522	.00020	-.00099	.36505	.19009	1.94655
.949	10.930	.01034	.52038	.13101	.03104	-.00410	.00023	-.00224	.48610	.22730	2.13956
.947	13.045	.01439	.64323	.13279	.01635	-.00313	-.00032	-.01045	.59647	.27436	2.16930
.951	15.266	.02356	.76351	.13696	-.00794	-.00267	-.00196	-.01344	.70051	.33317	2.10257
.950	17.410	.01969	.85876	.13944	-.01345	-.00330	-.00156	-.01173	.77758	.39037	1.99149
.952	19.568	.02507	.96944	.14492	-.01791	-.00242	-.00379	-.01225	.86329	.46134	1.47546
.950	21.759	.04602	1.05847	.15127	.00264	-.00143	-.00556	-.02741	.92734	.53302	1.73979
.950	22.668	.04732	1.04629	.15006	.01100	-.00457	-.00575	-.02443	.94455	.55712	1.69540

LA46 TABULATED SOURCE DATA

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LA-46 6-FT TPT 600 RI-0898/139 CRB SPL17 ELEVON

(RH1024)

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
ELV-LI = -30.000 ELV-RI = -30.000
ELV-RO = .000 BDFLAP = .000
SPDRK = 25.000

RUN NO. 14/ D

WAOH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CT	CL	CD	L/D
.978	-2.172	.00699	-.28001	.14349	.14536	-.00286	.00100	-.00492	-.27437	.15400	-1.78159
.981	-.044	.01014	-.14937	.14609	.12649	-.00314	.00088	-.01063	-.14846	.14620	-1.01815
.981	2.215	.01188	-.00283	.14532	.10513	-.00383	.00104	-.01248	-.00844	.14510	-.05817
.980	4.449	.01309	.13070	.14698	.08666	-.00408	.00113	-.01374	.11891	.15668	.75496
.979	6.574	.01203	.26315	.15019	.06579	-.00416	.00103	-.01263	.24423	.17933	1.36191
.980	8.778	.01092	.40135	.15991	.04198	-.00490	.00045	-.01006	.37245	.21930	1.69834
.980	10.921	.01069	.53307	.16583	.02102	-.00423	.00035	-.00982	.49200	.26383	1.86484
.980	13.131	.01981	.67981	.16517	-.00368	-.00406	-.00226	-.00922	.62451	.31529	1.98073
.979	15.368	.02510	.80365	.16311	-.01769	-.00300	-.00252	-.01295	.73169	.37026	1.97612
.980	17.648	.01347	.92878	.16308	-.00059	-.00402	.00032	-.01243	.83569	.43698	1.91224

RUN NO. 4/ D

WAOH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CT	CL	CD	L/D
1.079	-2.256	.00949	-.28401	.17444	.13667	-.00289	.00068	-.00498	-.25693	.18470	-1.39109
1.080	-.022	.01308	-.12843	.17465	.11472	-.00303	.00083	-.01203	-.12837	.17470	-.73479
1.080	2.127	.01496	.00297	.17515	.09379	-.00363	.00083	-.01344	-.00353	.17514	-.02016
1.080	4.310	.01508	.14161	.18127	.07309	-.00360	.00083	-.01354	.12692	.19184	.68159
1.081	6.677	.01423	.27409	.18374	.04965	-.00300	.00125	-.01421	.25087	.21436	1.17033
1.081	8.790	.01276	.40280	.18712	.02804	-.00358	.00046	-.01042	.36947	.24648	1.49900
1.080	10.946	.01240	.53216	.18885	.00713	-.00384	.00043	-.01052	.48662	.28546	1.69877
1.080	13.266	.01199	.67422	.18598	-.01741	-.00363	.00069	-.01109	.61364	.33334	1.82988
1.080	15.415	.01395	.79973	.17907	-.03373	-.00305	.00005	-.01070	.72443	.38134	1.89969
1.078	17.730	.01468	.91347	.17252	-.04314	-.00337	.00003	-.01138	.81754	.44251	1.84751

LA48 TABULATED SOURCE DATA

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LA-48 8-FT TPT 680 RI-0898/139 CR8 SPLIT ELEVON

(RM1003)

PARAMETRIC DATA

BETA = .000 ELV-LO = -10.000
 ELV-LI = -10.000 ELV-RI = -10.000
 ELV-RO = -10.000 BDPLAP = .000
 SPOBRK = 25.000 ALLRON = .000
 ELEVTR = -10.000

RUN NO. 73/ 0

ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.799	-2.064	.00429	.06161	.06888	-.00162	.00049	-.00772	-.20666	.06910	-2.99074
.799	-.072	.00584	.06415	.06943	-.00140	.00029	-.00935	-.11904	.06430	-1.45127
.799	.295	.00727	.06405	.06728	-.00126	.00004	-.01067	-.09902	.06349	-1.55955
.799	2.530	.00730	.06187	.06691	-.00127	-.00023	-.00995	.00272	.06205	.04344
.799	4.451	.00761	.06355	.06699	-.00134	-.00049	-.00963	.00447	.06340	1.39302
.799	6.494	.00728	.06424	.06440	-.00190	-.00070	-.00956	.19137	.06934	2.75404
.799	8.436	.00676	.06329	.06364	-.00243	-.00103	-.00647	.24492	.07996	3.56340
.799	10.994	.00517	.06192	.05735	-.00133	-.00001	-.00764	.39765	.11702	3.39413
.799	12.825	.00325	.04568	.04763	-.00146	-.00095	-.00903	.30335	.19959	3.15403
.799	14.447	.00552	.04631	.04043	-.00241	-.00005	-.00347	.61964	.21214	2.92053
.799	16.064	.00567	.04345	.03313	-.00243	-.00114	-.00321	.69733	.26437	2.63774
.799	18.919	.00696	.03300	.02637	-.00142	-.00145	-.00637	.81456	.33525	2.43000
.799	21.117	.00456	.03095	.02405	-.00077	-.00190	-.00767	.92434	.41161	2.24564
.799	21.975	.00462	.04977	.02322	-.00118	-.00190	-.00779	.96409	.44269	2.17777

RUN NO. 65/ 0

ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.799	-2.142	.00431	.06794	.07698	-.00224	.00107	-.00762	-.21236	.07593	-2.79665
.801	.043	.00694	.07014	.07159	-.00267	.00077	-.00996	-.10351	.07007	-1.47725
.799	2.020	.00991	.06902	.06734	-.00265	.00026	-.00945	-.00069	.06904	-.01005
.799	4.352	.00310	.06534	.06124	-.00205	.00070	-.00902	.12146	.07491	1.62360
.799	6.555	.00811	.06517	.05169	-.00355	.00013	-.00935	.23972	.09315	2.57344
.799	8.549	.00405	.06739	.04949	-.00399	-.00029	-.00907	.33722	.11904	2.83146
.799	10.797	.00430	.07299	.04442	-.00157	-.00020	-.00772	.42654	.15565	2.74035
.799	12.866	.00791	.07424	.04561	-.00220	-.00114	-.00434	.51037	.19687	2.59344
.799	15.273	.01005	.06400	.04549	-.00301	-.00153	-.00557	.61943	.25414	2.43732
.800	17.397	.01359	.06210	.03519	-.00393	-.00159	-.00593	.72942	.31995	2.24105
.799	19.343	.01604	.04864	.02594	-.00033	-.00197	-.01072	.81035	.37911	2.13752
.799	21.425	.01494	.04979	.02943	-.00094	-.00390	-.01002	.84370	.44322	1.99341
.799	22.400	.01940	.09143	.04071	-.00263	-.00425	-.00770	.89432	.46954	1.91304

ORIGINAL PAGE IS
 OF POOR QUALITY

LA48 TABULATED SOURCE DATA

PAGE 10

LA-48 8-PT TPT 600 RI-0098/136 CR8 SPLIT ELEVON

(RH1005)

PARAMETRIC DATA

BETA = .000 ELV-LO = -10.000
 ELV-LI = -10.000 ELV-RI = -10.000
 ELV-RO = -10.000 EDLAP = .000
 SMOBIL = 29.000 AIRLON = .000
 ELEVTR = -10.000

RUN NO. 55/ 0

WACH	ALPHA	BETA	CM	CA	CLM	CL	CIN	CT	CL	CD	L/D
.90	-2.104	.00179	-20109	.07239	.07406	-.00307	.00011	-.00360	-.19827	.07994	-2.40023
.90	-.002	.00903	-.09872	.07432	.06753	-.00470	.00027	-.00410	-.04672	.07433	-1.16380
.90	.495	.00923	-.06013	.07515	.06587	-.00494	-.00003	-.00425	-.01076	.07463	-.81441
.90	2.153	.01132	.03491	.07435	.05896	-.00495	-.00079	-.00792	.03209	.07561	.42443
.90	4.320	.01120	.16179	.07442	.04651	-.00479	-.00066	-.00421	.13572	.08640	1.80237
.90	6.470	.00996	.27166	.07759	.03948	-.00303	-.00041	-.00797	.26119	.10770	2.42306
.90	8.606	.00969	.37527	.08149	.03539	-.00263	-.00061	-.00704	.35885	.13672	2.62465
.89	10.917	.01053	.46115	.08722	.03089	-.00265	-.00137	-.00564	.43699	.17222	2.53503
.89	12.946	.01313	.55930	.09195	.03631	-.00274	-.00247	-.00483	.52370	.21474	2.43873
.89	15.026	.01491	.66591	.09498	.03167	-.00267	-.00196	-.00414	.61832	.26438	2.33952
.89	17.260	.01636	.78775	.09849	.02164	-.00340	-.00180	-.00776	.72305	.32778	2.20590
.89	19.414	.02047	.89593	.10043	.01792	-.00260	-.00249	-.01140	.81148	.39249	2.06542
.89	22.221	.02396	1.00447	.10293	.03127	-.00485	-.00302	-.00847	.89094	.47316	1.87502
.89	22.432	.02403	1.00772	.10368	.03391	-.00544	.00560	-.00674	.89174	.48065	1.85511

RUN NO. 45/ 0

WACH	ALPHA	BETA	CM	CA	CLM	CL	CIN	CT	CL	CD	L/D
.901	-2.104	.00479	-16373	.08471	.07164	-.00429	.00048	-.00672	-.18039	.09190	-1.96929
.901	.007	.00726	-.05664	.08729	.03726	-.00424	.00059	-.00799	-.05665	.08724	-.84913
.903	2.219	.00947	.07376	.08727	.04211	-.00416	.00042	-.00937	.07232	.09014	.80233
.903	4.377	.01174	.19415	.08865	.03200	-.00171	.00074	-.01226	.18692	.10321	1.91003
.903	6.345	.01069	.29956	.09178	.02853	.00017	.00071	-.01131	.28715	.12333	2.29116
.903	8.663	.01192	.36964	.09743	.02768	-.00329	-.00027	-.00939	.36947	.15323	2.37979
.903	10.429	.01289	.50235	.09939	.02527	-.00331	-.00045	-.00968	.47494	.19202	2.47342
.903	12.971	.01612	.61197	.10306	.00941	-.00174	-.00243	-.00664	.57322	.23779	2.41062
.909	15.171	.01991	.73174	.10593	-.00339	-.00246	-.00036	-.01292	.67863	.29332	2.31362
.909	17.307	.01827	.84131	.10759	-.00990	-.00297	-.00124	-.01265	.77122	.35300	2.19477
.909	19.474	.02165	.95040	.11039	-.01167	-.00255	-.00194	-.01379	.89933	.42063	2.04293
.909	21.616	.02592	1.02399	.11395	-.00029	-.00323	-.00092	-.01169	.90915	.48292	1.88300
.909	22.563	.02602	1.04341	.11427	.00944	-.00479	-.00405	-.01191	.91970	.50547	1.81904

LA48 TABULATED SOURCE DATA

PAGE 19

LA-48 8-PT 10T 800 RT-0498/138 ORG SPLIT ELEVON

(RM1005)

PARAMETRIC DATA

BETA = .000 ELV-LO = -10.000
ELV-LI = -10.000 ELV-RI = -10.000
ELV-RO = -10.000 BDFLAP = .000
SPDRK = 25.000 AIRLON = .000
ELEVTR = -10.000

RUN NO. 35/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.920	-2.181	.00482	-1.7011	.09184	.07263	-.00453	.00125	-.00777	-.17452	.09849	-1.77194
.925	.042	.00777	-.04183	.09499	.03259	-.00433	.00113	-.00908	-.04172	.09436	-.44115
.931	2.828	.00999	.09324	.09483	.03268	-.00397	.00104	-.01113	.09149	.09826	.93102
.936	4.390	.01067	.20153	.09534	.02834	-.00047	.00181	-.01440	.19366	.11043	1.75339
.940	6.534	.01129	.30648	.09787	.02639	-.00024	.00091	-.01221	.29335	.13211	2.22052
.946	8.673	.01222	.40770	.10199	.01977	-.00339	.00046	-.01173	.38766	.16231	2.39841
.949	10.874	.01218	.52940	.10418	.00547	-.00374	.00044	-.01169	.50024	.20218	2.47429
.950	13.015	.01442	.64169	.10634	-.00531	-.00212	-.00246	-.00721	.60126	.24812	2.43284
.951	15.206	.01632	.76931	.10940	-.01870	-.00219	-.00025	-.01339	.71369	.30735	2.32209
.956	17.352	.01978	.87937	.11106	-.02971	-.00294	-.00114	-.01379	.80641	.36835	2.19927
.959	19.326	.02312	.98214	.11343	-.03033	-.00294	-.00203	-.01435	.88760	.43556	2.03793
.961	21.662	.02613	1.04631	.11782	-.01562	-.00249	-.00294	-.01467	.92493	.49371	1.87392
.964	22.818	.02578	1.06543	.12076	-.00769	-.00659	-.00329	-.00747	.93742	.52137	1.79900

RUN NO. 35/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.951	-2.143	.00353	-1.9099	.10999	.09204	-.00259	.00146	-.00943	-.18690	.11303	-1.63323
.956	.041	.00671	-.05514	.10901	.06948	-.00266	.00195	-.01142	-.03522	.10997	-.90673
.951	2.230	.00949	.08298	.10999	.04774	-.00316	.00194	-.01364	.07866	.11274	.69771
.951	4.429	.00907	.21463	.10923	.02799	-.00294	.00236	-.01444	.20934	.12378	1.65596
.950	6.814	.01070	.33666	.10924	.01719	-.00169	.00197	-.01323	.32194	.14729	2.19904
.949	9.758	.01332	.45312	.10934	.00165	-.00064	.00155	-.01200	.43110	.17765	2.42062
.951	10.920	.00903	.54310	.11125	-.01700	-.00278	.00169	-.01249	.53135	.21994	2.01635
.950	13.114	.01247	.70218	.11221	-.02701	-.00256	-.00706	-.01019	.65937	.26864	2.45073
.949	15.290	.01690	.83114	.11324	-.04942	-.00223	-.00249	-.01266	.77133	.33034	2.33495
.951	17.457	.02092	.93053	.11836	-.06782	-.00291	-.00277	-.00935	.87125	.39406	2.18873
.950	19.728	.02412	1.09097	.12126	-.06378	-.00216	-.00313	-.01135	.94826	.46886	2.02244
.949	21.829	.04444	1.13632	.12709	-.04000	-.00265	-.00065	-.02232	1.07774	.54057	1.85424
.949	22.714	.04686	1.14533	.12919	-.02323	-.00394	-.00451	-.01570	1.00661	.56142	1.79296

ORIGINAL PAGE IS
OF POOR QUALITY

LA-48 8-FT TPT 800 RI-0098/139 ORG 3PL11 ELEVON

(RH1005)

PARAMETRIC DATA

BETA = .000 ELV-LO = -10.000
 ELV-LI = -10.000 ELV-RI = -10.000
 ELV-RO = -10.000 BDPLAP = .000
 SPDRK = 25.000 AIRCON = .000
 ELEVTR = -10.000

RUN NO. 15/ 0

WAO	ALPHA	BETA	CN	CA	CLM	COL	CYN	CT	CL	CD	L/D
.979	-2.221	.00422	-.19459	.12379	.09731	-.00290	.00139	-.00410	-.19344	.13140	-1.47369
.990	2.40	.00479	-.04046	.12813	.07316	-.00345	.00165	-.01187	-.04950	.12793	-.38299
.990	3.293	.01037	.14701	.12801	.04096	-.00354	.00145	-.01254	.13941	.13624	1.02320
.975	4.608	.01055	.22779	.12839	.02895	-.00307	.00174	-.01357	.21674	.14626	1.48197
.979	6.601	.00971	.34101	.12946	.01248	-.00267	.00180	-.01250	.32441	.16427	1.92783
.940	8.840	.00953	.47572	.13293	-.00451	-.00301	.00129	-.01146	.44950	.20479	2.19487
.943	11.014	.00949	.60365	.13447	-.02360	-.00309	.00121	-.01120	.56620	.25164	2.24966
.979	12.742	.01712	.71176	.13639	-.04321	-.00261	-.00791	-.01112	.66394	.29048	2.28361
.979	13.430	.02171	.87042	.14063	-.06333	-.00304	-.00194	-.01192	.80149	.36753	2.14144
.940	17.496	.01225	.99870	.14599	-.07489	-.00367	.00739	-.01129	.90359	.44569	2.03187

RUN NO. 15/ 0

WAO	ALPHA	BETA	CN	CA	CLM	COL	CYN	CT	CL	CD	L/D
1.079	-2.216	.00463	-.17630	.14768	.08730	-.00269	.00152	-.00942	-.17266	.13447	-1.11773
1.040	.047	.00964	-.04443	.14846	.06994	-.00329	.00143	-.01253	-.04463	.14840	-.30049
1.062	2.293	.01225	.09422	.14914	.04160	-.00317	.00177	-.01426	.04118	.15279	.57713
1.041	4.401	.01161	.22131	.15229	.01475	-.00307	.00144	-.01402	.20917	.16493	1.23493
1.040	6.621	.01160	.34631	.15414	-.00062	-.00263	.00174	-.01376	.32623	.19304	1.64994
1.090	9.091	.01173	.48299	.15346	-.02071	-.00267	.00796	-.01125	.45221	.22419	1.94172
1.040	10.079	.01264	.59074	.15313	-.03313	-.00247	.00715	-.00946	.55037	.26240	2.09301
1.041	13.237	.01135	.71997	.15291	-.05144	-.00321	.00711	-.00843	.66583	.31370	2.12247
1.040	15.446	.01294	.87930	.15322	-.06442	-.00330	-.00725	-.00979	.76437	.37127	2.09955
1.074	17.681	.01408	.99937	.15747	-.07990	-.00326	-.00733	-.00944	.86610	.44140	1.96042

LAKE TABULATED SOURCE DATA

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LA-48 4-FT TPT 640 RI-0498/139 CR8 SPLIT ELEVON

(RM1006)

PARAMETRIC DATA

BETA = .000 ELV-LO = -20.000
 ELV-LI = -20.000 ELV-RI = -20.000
 ELV-RO = -20.000 SDFAP = .000
 POSRK = 20.000 AIRRON = .000
 ELEVTR = -20.000

RUN NO. 76/ 0

WACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.799	-2.169	.00451	-.32763	.07649	.12476	-.00145	.00115	-.01002	-.32467	.09893	-3.64990
.800	-.026	.07641	-.22069	.07923	.11964	-.00075	.00084	-.01182	-.22064	.07933	-2.79140
.801	2.211	.00750	-.11075	.07779	.11515	-.00070	.00021	-.01153	-.11367	.07346	-1.54739
.802	4.107	.00700	-.01345	.07314	.11236	-.00081	.00007	-.01131	-.01865	.07139	-.25913
.803	6.041	.00750	.07933	.06541	.11111	-.00111	-.00012	-.01042	.07200	.07340	.90099
.804	8.359	.00600	.19764	.05413	.10965	-.00147	-.00026	-.00882	.07687	.09224	2.24073
.805	10.644	.00603	.33616	.05119	.09942	-.00183	-.00039	-.00779	.32092	.11240	2.85518
.806	12.599	.00528	.43268	.05616	.09472	-.00235	-.00039	-.00672	.41054	.14910	2.75002
.807	14.826	.00633	.55348	.05623	.09253	-.00170	-.00040	-.00835	.52065	.19399	2.85654
.808	16.918	.00593	.64644	.06396	.08468	-.00259	-.00072	-.00691	.67611	.24844	2.41554
.809	17.691	.00637	.73699	.06408	.08491	-.00231	-.00053	-.00703	.67749	.29845	2.29230
.810	20.997	.00712	.86167	.06299	.08205	-.00233	-.00031	-.00703	.74188	.36756	2.12721
.811	22.015	.00805	.92269	.06212	.09337	-.00175	-.00132	-.00869	.83219	.40332	2.03339

RUN NO. 66/ 0

WACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.799	-2.255	.00334	-.33634	.08397	.14106	-.00202	.00180	-.00427	-.33278	.09714	-3.42590
.800	-.167	.00495	-.22739	.08632	.13337	-.00219	.00118	-.00335	-.22714	.09698	-2.61140
.801	.049	.00675	-.21189	.08329	.12987	-.00181	.00139	-.01074	-.21196	.09510	-2.49065
.802	2.136	.00849	-.09394	.08355	.12189	-.00183	.00085	-.01084	-.09889	.07992	-1.23735
.803	4.144	.00834	.01906	.07988	.11384	-.00226	.00055	-.00932	.09074	.09078	.11446
.804	6.432	.00852	.10251	.07777	.09666	-.00277	.00040	-.00859	.17274	.09554	1.50871
.805	8.694	.00795	.29814	.07945	.07980	-.00329	.00074	-.00808	.29286	.12262	2.30683
.806	10.679	.00756	.40680	.08112	.06996	-.00311	.00074	-.00785	.39473	.15309	2.48069
.807	12.872	.00902	.51935	.08365	.06429	-.00316	-.00151	-.00682	.48767	.19725	2.47234
.808	15.127	.00568	.63491	.07673	.06227	-.00377	-.00152	-.00523	.59028	.24941	2.36673
.809	17.094	.01249	.74048	.09074	.06472	-.00165	-.00145	-.00373	.69057	.30709	2.21596
.810	19.132	.01361	.84003	.09437	.05932	-.00149	-.00178	-.01083	.76258	.36474	2.07077
.811	21.344	.01490	.91810	.09793	.06563	-.00227	-.00315	-.01034	.81915	.42890	1.92247
.812	22.675	.02157	.94512	.10122	.06419	-.00232	-.00423	-.01010	.93306	.45771	1.82006

LA48 TABULATED SOURCE DATA

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LA-48 8-FT TPT 680 RI-0898/139 CRB SPLIT ELEVON

(RM1006)

PARAMETRIC DATA

BETA = .000 ELV-LO = -20.000
 ELV-LI = -20.000 ELV-RI = -20.000
 ELV-RO = -20.000 BDCLAP = .000
 SPOERK = 25.000 AIRCON = .000
 ELEVTR = -20.000

RUN NO. 36/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.849	-2.238	.00587	-.32956	.08722	.14461	-.00481	.00038	-.00640	-.32990	.10003	-3.25815
.850	-.190	.00809	-.21216	.08915	.13557	-.00460	.00013	-.00772	-.21193	.08970	-2.36252
.849	.316	.00884	-.18123	.08765	.12914	-.00415	.00006	-.00821	-.18171	.08665	-2.09708
.849	2.900	.00688	-.06342	.08661	.11729	-.00443	-.00037	-.00861	-.06685	.08400	-.79583
.849	4.323	.01192	.08436	.08557	.10153	-.00442	-.00047	-.00945	.03772	.09018	.64014
.843	7.477	.01066	.25884	.08782	.07491	-.00415	-.00032	-.00881	.24521	.12075	2.03072
.850	9.937	.01722	.33678	.09003	.06599	-.00386	-.00047	-.00800	.31893	.14072	2.26653
.850	10.930	.00971	.43269	.09396	.05425	-.00299	-.00060	-.00692	.42666	.17809	2.39584
.850	12.745	.01109	.54733	.09577	.04532	-.00263	-.00107	-.00712	.51271	.21416	2.39406
.849	15.261	.01251	.66287	.09958	.04427	-.00134	-.00094	-.00928	.61329	.29657	2.26685
.850	18.198	.01290	.70860	.10298	.04308	-.00024	-.00072	-.00964	.65174	.29657	2.19761
.849	19.117	.01832	.83177	.10765	.04927	-.00034	-.00207	-.01140	.79065	.37411	2.00647
.849	21.901	.02239	.91122	.11280	.06781	-.00210	-.00351	-.01129	.80647	.43993	1.83735
.849	22.407	.02298	.92690	.11567	.08195	-.00210	-.00453	-.00898	.81283	.46026	1.76601

RUN NO. 46/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.900	-2.243	.00702	-.32998	.08857	.15771	-.00480	.00074	-.00821	-.32587	.11141	-2.92496
.900	-.054	.00938	-.19684	.08981	.14080	-.00439	.00042	-.00928	-.19685	.09980	-1.97244
.900	2.140	.01090	-.03902	.08824	.12034	-.00424	-.00003	-.00913	-.06165	.09801	-.64214
.900	4.312	.01201	.08177	.08822	.09872	-.00399	.00003	-.01038	.07416	.10409	.71244
.900	6.970	.01193	.22398	.10049	.07851	-.00371	.00016	-.00976	.21116	.12520	1.68654
.899	8.658	.01131	.35467	.10437	.05711	-.00334	-.00002	-.00970	.33492	.15655	2.13944
.899	10.819	.01041	.47543	.10606	.04103	-.00195	.00004	-.00929	.44681	.19479	2.29378
.899	12.997	.01248	.56643	.11140	.04457	-.00157	-.00126	-.00915	.52687	.23594	2.23308
.900	15.130	.01485	.66251	.11714	.04573	-.00109	-.00020	-.01254	.60897	.28600	2.12922
.899	17.286	.01955	.76815	.11915	.04074	-.00190	-.00090	-.01390	.69783	.34271	2.03622
.901	19.489	.02133	.87934	.12248	.03916	-.00140	-.00183	-.01381	.78700	.40822	1.92824
.899	21.566	.02444	.94910	.12998	.03147	-.00255	-.00370	-.01134	.83635	.46603	1.79463
.900	22.533	.02603	.96844	.12687	.08053	-.00389	-.00401	-.01201	.84597	.48812	1.73313

LA-48 7 BULATED SOURCE DATA

PAGE 23

LA-48 8-PT TPT 600 RI-0694/139 CR8 SPL17 ELEVON

(RM1006)

PARAMETRIC DATA

BETA = .000 ELV-LO = -20.000
 ELV-LI = -20.000 ELV-RI = -20.000
 ELV-RO = -20.000 SDFAP = .000
 SPOBRK = 25.000 AILRON = .000
 ELEVTR = -20.000

RUN NO. 36/ 0

MAOH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.920	-2.241	.00635	-.34021	.10703	.17203	-.00445	.00043	-.00797	-.33376	.12025	-2.79213
.920	-.039	.00954	-.20454	.10734	.13165	-.00461	.00046	-.00934	-.20443	.10759	-1.90001
.920	2.145	.01057	-.03591	.10584	.12704	-.00433	.00013	-.00923	-.05993	.10367	-.57712
.921	4.341	.01145	.09232	.10622	.10231	-.00386	.00024	-.01029	.08401	.11291	.74404
.920	6.311	.01237	.22678	.10756	.09203	-.00322	.00019	-.01097	.21312	.13256	1.60744
.920	8.705	.01032	.35741	.11047	.06180	-.00240	.00062	-.01075	.33651	.16369	2.05585
.919	10.450	.01121	.48505	.11332	.03979	-.00217	.00023	-.01030	.45501	.20279	2.24371
.920	12.999	.01440	.59409	.11770	.03954	-.00164	-.00159	-.00754	.54265	.24607	2.20324
.920	15.197	.01546	.69740	.12221	.03203	-.00157	-.00025	-.01297	.64038	.30075	2.13123
.920	17.332	.01922	.80661	.12450	.02034	-.00224	-.00107	-.01560	.73290	.35915	2.00067
.919	19.449	.02315	.90445	.12564	.02164	-.00211	-.00180	-.01513	.81109	.42032	1.92964
.920	21.642	.02596	.98104	.12496	.03264	-.00231	-.00305	-.01417	.86436	.48170	1.79441
.919	22.990	.02615	.99944	.13136	.04496	-.00459	-.00444	-.01021	.97229	.50521	1.72659

RUN NO. 26/ 0

MAOH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.931	-2.227	.00652	-.33996	.12060	.14124	-.00421	.00094	-.00909	-.33302	.13372	-2.50333
.932	-.034	.00962	-.19718	.12171	.16060	-.00397	.00072	-.00994	-.19711	.12143	-1.61795
.932	2.161	.01182	-.05023	.12003	.13360	-.00403	.00044	-.01049	-.05472	.11805	-.46351
.931	4.363	.01094	.10354	.11914	.10401	-.00364	.00090	-.01154	.09417	.12672	.74316
.930	6.350	.01049	.24275	.12722	.09009	-.00294	.00136	-.01254	.22746	.14712	1.54675
.930	8.737	.00941	.36328	.12228	.03476	-.00204	.00104	-.01117	.30726	.17904	2.01171
.931	10.933	.00841	.51469	.12456	.03133	-.00204	.00143	-.01122	.48173	.21992	2.19051
.930	13.094	.01132	.63410	.12607	.02317	-.00269	.00018	-.00994	.58905	.26645	2.21072
.930	15.267	.01742	.75073	.12789	.00614	-.00251	-.00099	-.01164	.69056	.32106	2.15090
.930	17.417	.02041	.86592	.13025	-.01044	-.00234	-.00230	-.01075	.78723	.38347	2.05292
.949	19.596	.02455	.97956	.13293	-.01460	-.00123	-.00237	-.01401	.87824	.45376	1.93346
.930	21.745	.04404	1.07195	.13425	.00571	-.00099	-.00636	-.02279	.94409	.52619	1.79414
.930	22.697	.04933	1.09949	.13904	.01493	-.00311	-.00600	-.02327	.96104	.53272	1.73476

ORIGINAL PAGE IS
 OF POOR QUALITY

LA48 TABULATED SOURCE DATA

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LA-48 8-PT TPT 690 RI-0998/139 ORD SPLIT ELEVON

(RH1008)

PARAMETRIC DATA

BETA = .000 ELV-LO = -20.000
 ELV-LI = -20.000 ELV-RI = -20.000
 ELV-RO = -20.000 BDFLAP = .000
 SPOBRK = 25.000 AIRCON = .000
 ELEVR = -20.000

RUN NO. 16/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.976	-2.127	.00730	-.33226	.14259	.19631	-.03334	.00103	-.00486	-.32674	.15483	-2.11034
.980	-.046	.01039	-.19487	.14379	.16190	-.03322	.00093	-.01065	-.19475	.14395	-1.35288
.981	2.112	.01164	-.04622	.14205	.13338	-.03337	.00103	-.01226	-.05142	.14025	-.36664
.980	4.357	.01191	.10598	.14335	.10423	-.03283	.00135	-.01346	.09469	.15098	.62712
.978	6.901	.01075	.23657	.14431	.08220	-.03246	.00135	-.01259	.22067	.17059	1.29336
.979	8.769	.01063	.34601	.14813	.05314	-.03318	.00119	-.01220	.35891	.20325	1.74867
.979	10.959	.01106	.52831	.15204	.02473	-.03324	.00113	-.01225	.48977	.24970	1.96142
.979	13.169	.01903	.66067	.15058	.00629	-.03311	-.00160	-.01058	.60999	.29714	2.04951
.982	15.300	.02168	.78772	.15487	-.00927	-.03324	-.00205	-.01190	.71894	.35724	2.01251
.980	17.551	.01418	.90522	.15628	-.01402	-.03387	-.00014	-.01129	.81595	.42198	1.93361

RUN NO. 6/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
1.090	-2.290	.00960	-.30600	.17068	.16943	-.03240	.00122	-.01070	-.29897	.18272	-1.62624
1.090	-.028	.01206	-.16162	.17127	.14255	-.03304	.00151	-.01336	-.16154	.17134	-.94276
1.090	2.165	.01377	-.02043	.17025	.11454	-.03296	.00127	-.01399	-.02685	.16936	-.15932
1.090	4.290	.01480	.11460	.17091	.08795	-.03305	.00141	-.01907	.10128	.16190	.55678
1.091	6.510	.01322	.24885	.17591	.06442	-.03265	.00144	-.01405	.22730	.20299	1.11976
1.090	8.451	.01169	.39742	.17731	.03424	-.03290	.00124	-.01238	.36540	.23635	1.54601
1.079	11.001	.01231	.52891	.17453	.00942	-.03362	.00093	-.01197	.48589	.27225	1.78472
1.079	13.202	.01165	.65494	.16956	-.00666	-.03399	.00010	-.00905	.59889	.31475	1.90271
1.090	15.415	.01214	.76347	.16328	-.01631	-.03408	-.00004	-.00595	.69785	.36387	1.91788
1.078	17.777	.01480	.89689	.16748	-.03002	-.03306	-.00024	-.01065	.80293	.43331	1.85302

LA48 TABULATED SOURCE DATA

LA-48 3-FT TPT 680 RI-0698/139 ORB SPLIT ELEVON

(RH1007)

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PARAMETRIC DATA

BETA = .000 ELV-LO = 9.000
ELV-LI = .000 ELV-RI = .000
ELV-RO = -9.000 BDFLAP = .000
SPOBRK = 25.000

RUN NO. 77/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CT	CL	CD	L/D
.799	-2.013	.00691	-.06204	.06442	-.00440	.00639	.00114	-.01349	-.05974	.06856	-.89780
.799	.056	.00800	.03613	.06619	-.00697	.00677	.00139	-.01379	.03607	.06822	.54468
.800	.284	.00843	.04557	.05623	-.00756	.00692	.00107	-.01345	.04524	.06646	.64081
.799	2.345	.01002	.14567	.06404	-.00926	.00764	.00075	-.01683	.14293	.06995	2.04334
.799	4.373	.01034	.24532	.05839	-.01147	.00814	.00056	-.01708	.24015	.07693	3.12166
.799	6.396	.01051	.35071	.04943	-.01413	.00812	.00042	-.01665	.34302	.08820	3.84891
.799	8.439	.00953	.46264	.03895	-.01554	.00715	.00015	-.01449	.45188	.10658	4.23975
.799	10.542	.00775	.58082	.04546	-.03112	.01191	.00207	-.01771	.56270	.19096	3.72758
.799	12.626	.00851	.69193	.05008	-.03824	.00963	.00037	-.01391	.66425	.20011	3.31938
.799	14.842	.00825	.83039	.05459	-.04931	.00695	-.00046	-.01104	.78870	.28549	2.97080
.799	17.112	.01003	.95329	.06240	-.06211	.00730	-.00101	-.01223	.89272	.34014	2.62458
.799	19.956	.01113	1.06069	.06152	-.06664	.00831	-.00152	-.01259	.99319	.40273	2.44129
.799	21.247	.01171	1.18077	.05900	-.06353	.00763	-.00186	-.01274	1.07913	.48299	2.23472
.797	22.117	.01094	1.23287	.05824	-.06055	.00626	-.00194	-.01141	1.12022	.51813	2.16204

RUN NO. 87/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CT	CL	CD	L/D
.799	-2.056	.00637	-.06712	.06422	-.00269	.00469	.00195	-.01207	-.06463	.07050	-.91563
.801	.051	.00965	.03541	.07010	-.00491	.00495	.00156	-.01406	.03534	.07014	.50393
.799	2.541	.01145	.16556	.06426	-.01090	.00576	.00114	-.01460	.16237	.07554	2.14958
.799	4.380	.01246	.27426	.06533	-.01660	.00672	.00127	-.01601	.26047	.08679	3.11849
.799	6.693	.01148	.38434	.06780	-.02217	.00723	.00122	-.01495	.37399	.11197	3.34209
.799	8.690	.01025	.48372	.07043	-.02800	.00656	.00067	-.01214	.46753	.14271	3.27617
.799	10.772	.01162	.57880	.07630	-.03347	.00911	.00039	-.01271	.55424	.18314	3.02690
.799	12.881	.01207	.69171	.08078	-.04361	.00846	-.00074	-.00996	.65630	.23295	2.81727
.799	15.141	.01337	.83555	.08473	-.05485	.00671	-.00097	-.01091	.78441	.30702	2.61451
.797	17.358	.01949	.97122	.09009	-.07060	.00962	-.00156	-.01328	.90012	.37573	2.39564

LA-48 8-FT TPT 680 RI-0896/199 CR8 SPL17 ELEVON

(RH1007)

PARAMETRIC DATA

BETA = .000 ELV-LO = 9.000
 ELV-LI = .000 ELV-RI = .000
 ELV-RO = -9.000 SDFLAP = .000
 SPOERK = 25.000

RUN NO. 57/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.890	-2.079	.00370	-.05720	.07209	-.01450	.00040	.00110	-.00844	-.03455	.07412	-.73600
.890	-.146	.00942	.09960	.07404	-.01367	.00060	.00097	-.01147	.05941	.07420	-.80076
.890	2.268	.01169	.17899	.07379	-.02220	.00132	.00039	-.01190	.17593	.08081	2.17703
.890	4.431	.01263	.28659	.07339	-.02325	.00333	.00071	-.01364	.27991	.09730	2.87666
.890	6.310	.01117	.37306	.07877	-.03093	.00249	.00039	-.01137	.36214	.11929	3.03590
.849	8.684	.01049	.49621	.08204	-.04097	.00107	.00031	-.00870	.47913	.15802	3.06448
.849	12.949	.01736	.71370	.09225	-.06263	.00763	.00231	-.00927	.67488	.24983	2.70139
.890	14.194	.01590	.78948	.09423	-.06741	.00590	.00192	-.00876	.74227	.28493	2.60507
.849	15.285	.01683	.86304	.09639	-.07779	.00570	.00093	-.01307	.80710	.32048	2.51839
.849	22.778	.01275	1.12645	.11070	-.04108	-.01007	.00104	.01990	.99575	.53818	1.83022

RUN NO. 47/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.900	-2.072	.00404	-.04897	.08349	-.01547	-.00190	.00191	-.00819	-.04591	.08521	-.33885
.901	-.089	.00451	.07053	.08601	-.02464	-.00182	.00173	-.01245	.07039	.08612	.81734
.900	2.234	.01101	.18098	.08590	-.02941	-.00079	.00144	-.01373	.17749	.09289	1.91086
.900	4.403	.01197	.26998	.08840	-.02161	.00377	.00148	-.01469	.26229	.10847	2.40922
.900	6.555	.01207	.38590	.09134	-.03403	.00335	.00090	-.01307	.37256	.13475	2.76479
.900	8.703	.01294	.49344	.09510	-.04768	.00373	.00079	-.01184	.47534	.16998	2.81293
.899	10.881	.01336	.62745	.09733	-.06321	.00431	.00079	-.01190	.59780	.21402	2.79322
.899	13.039	.01806	.74402	.10221	-.07975	.00651	.00210	-.00954	.70178	.26742	2.62430
.900	15.214	.01740	.87978	.10724	-.09690	.00513	.00090	-.01369	.82081	.33436	2.45487
.900	17.382	.01912	.99199	.10998	-.10621	.00404	.00153	.01251	.91393	.40132	2.27709

RUN NO. 37/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.921	-2.106	.00413	-.05423	.09326	-.01390	-.00430	.00178	-.00878	-.05078	.09519	-.53349
.921	-.084	.00683	.06213	.09313	-.02093	-.00401	.00164	-.01069	.06200	.09324	.65095
.920	2.249	.00977	.17377	.09418	-.02475	-.00203	.00154	-.01279	.17194	.10101	1.70223
.920	4.404	.01175	.27056	.09573	-.02246	.00203	.00162	-.01468	.26241	.11622	2.23796
.920	6.592	.01335	.39923	.09790	-.03674	.00321	.00070	-.01334	.36539	.14302	2.69489
.920	8.724	.01328	.50994	.10098	-.03320	.00237	.00032	-.01219	.49979	.17677	2.76514
.919	10.928	.01439	.64302	.10300	-.07514	.00319	.00026	-.01147	.61191	.22242	2.74626
.920	13.078	.02018	.76398	.10715	-.08917	.00535	.00053	-.00915	.71992	.27725	2.59669
.919	15.254	.01869	.90302	.11193	-.10117	.00422	.00101	-.01316	.84178	.34588	2.43653
.919	22.659	.02208	1.17821	.12785	-.04298	-.00441	.00056	.00269	1.03902	.57187	1.81511

LA48 TABULATED SOURCE DATA

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LA-48 6-FT TPT 680 RI-0698/139 CR8 SPLIT ELEVON

(RH1007)

PARAMETRIC DATA

BETA = .000 ELV-L0 = 5.000
 ELV-L1 = .000 ELV-R1 = .000
 ELV-R0 = -5.000 BDFLAP = .000
 SPOREK = 25.000

RUN NO. 27/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.951	-2.106	.00901	-.06791	.10986	-.00230	-.00090	.00126	-.00784	-.06396	.11128	-.57397
.951	.065	.00967	.05663	.11102	-.01611	-.00012	.00117	-.01032	.05670	.11108	.51043
.951	2.262	.01071	.18742	.11030	-.03264	.00337	.00115	-.01213	.14292	.11781	1.55530
.951	4.492	.01704	.31937	.10890	-.04790	.00226	.00174	-.01337	.30996	.13337	2.32408
.953	6.829	.01205	.42991	.10457	-.05621	.00263	.00063	-.01171	.41490	.15748	2.63214
.953	8.794	.01290	.55367	.10990	-.07297	.00263	.00002	-.01034	.53036	.19326	2.74436
.953	10.969	.01182	.67704	.1214	-.09920	.00240	-.00017	-.00923	.64334	.23491	2.69275
.953	13.154	.01411	.80795	.11480	-.10821	.00300	-.00106	-.00855	.76062	.29556	2.57265
.953	15.334	.01575	.94943	.12070	-.13612	.00295	-.00067	-.01122	.88377	.36711	2.40739
.951	17.505	.02145	1.07267	.12604	-.15641	.00312	-.00325	-.00840	.98908	.44244	2.22423
.949	19.675	.02595	1.16325	.12906	-.14970	.00334	-.00427	-.00954	1.05325	.50937	2.06774
.949	21.856	.03005	1.24900	.13157	-.12406	.00706	-.00753	-.02109	1.11023	.54711	1.89100

RUN NO. 17/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.978	-2.094	.00629	-.07306	.12764	.00979	.00749	.00105	-.00410	-.06434	.13022	-.52481
.980	.157	.00941	.05703	.13071	-.01043	.00021	.00069	-.00947	.05667	.13047	.43303
.980	2.275	.01194	.18535	.13032	-.02429	.00039	.00067	-.01135	.14004	.13757	1.30469
.979	4.446	.01105	.32063	.12847	-.04819	.00194	.00084	-.01126	.30970	.15294	2.02502
.979	6.702	.01110	.44534	.12946	-.06234	.00226	.00164	-.01373	.42719	.18055	2.36609
.980	8.461	.01141	.57097	.13232	-.08126	.00290	.00065	-.01104	.54375	.21449	2.44077
.980	11.077	.01259	.70077	.13791	-.09985	.00382	.00020	-.01070	.66121	.26994	2.44912
.980	13.215	.02033	.83619	.14232	-.12302	.00370	-.00102	-.01336	.78147	.32991	2.30070
.980	15.337	.02590	.97012	.14645	-.14237	.00414	-.00293	-.01226	.89684	.39783	2.25433
.979	17.637	.01767	1.09724	.15044	-.15490	.00341	-.00169	-.00971	1.00312	.47543	2.10183
.979	19.780	.01997	1.21467	.15225	-.16732	.00232	-.00141	-.00915	1.09543	.55350	1.97289

RUN NO. 7/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
1.079	-2.078	.00929	-.06389	.14546	.00634	.00149	.00064	-.00472	-.06036	.14815	-.40476
1.080	.108	.01265	.05631	.14626	-.00973	.00148	.00090	-.01089	.05404	.14637	.39690
1.080	2.966	.01441	.20917	.14797	-.03354	.00160	.00034	-.01158	.20234	.15709	1.26407
1.079	4.769	.01410	.33755	.15009	-.05483	.00294	.00107	-.01358	.32391	.17764	1.42340
1.080	6.949	.01249	.45310	.15293	-.06760	.00297	.00004	-.01560	.41293	.19953	2.05932
1.079	8.744	.01306	.55324	.15399	-.08499	.00248	.00077	-.01194	.52346	.23590	2.21902
1.080	11.029	.01375	.64359	.15491	-.10229	.00312	.00054	-.01147	.64135	.24241	2.26789
1.080	13.241	.01331	.81397	.15589	-.12145	.00312	.00029	-.00999	.75667	.33400	2.23470
1.078	15.716	.01576	.95029	.15736	-.13439	.00417	.00016	-.00916	.87271	.43564	2.13356
1.074	18.090	.01506	1.04453	.16201	-.15059	.00340	.00011	-.00927	.94061	.49076	1.99416

LA48 TABULATED SOURCE DATA

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LA-48 8-FT TPT 600 RI-0598/139 CRB SPLIT ELEVON

(RH1008)

PARAMETRIC DATA

BETA = .000 ELV-LO = 9.000
ELV-LI = -80.000 ELV-RI = -80.000
ELV-RO = -9.000 SDOPLAP = .000
SPDRK = 25.000

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.997	-1.980	.05703	-.22375	.07116	.07690	.00773	.00122	-.01394	-.22116	.07877	-2.40789
.999	.001	.00626	-.13235	.07324	.07434	.00763	.00101	-.01901	-.13234	.07324	-1.40897
.999	2.131	.00991	-.03161	.07162	.07124	.00784	.00079	-.01664	-.03426	.07339	-.49663
.999	4.413	.01119	.04191	.06351	.06984	.00915	.00063	-.01822	.07652	.07161	1.06965
.999	6.434	.01038	.14034	.03714	.07113	.00932	.00061	-.01706	.17290	.07699	2.24450
.999	8.446	.01209	.27768	.04737	.07324	.00970	.00047	-.01626	.26791	.07877	3.05590
.999	10.612	.00454	.40044	.04763	.06370	.01110	.00179	-.01401	.34995	.11670	3.30728
.999	12.490	.00766	.50703	.04713	.05710	.01028	.00116	-.01491	.49483	.15569	3.11409
.999	14.606	.00970	.63410	.04966	.04787	.00990	.00029	-.01441	.60134	.20699	2.90517
.999	16.314	.00457	.70914	.03784	.04422	.00848	-.00016	-.01249	.66434	.25471	2.60824
.999	18.845	.00960	.85739	.03995	.03197	.00932	-.00066	-.01292	.79242	.33264	2.39222
.997	21.140	.01103	.99579	.03678	.03297	.00822	-.00138	-.01315	.90929	.41208	2.20413
.999	21.934	.01100	1.04101	.03646	.03306	.00707	-.00145	-.01294	.94441	.44136	2.13990

RUN NO. 78/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.799	-2.079	.00703	-.22616	.07702	.09291	.00992	.00199	-.01296	-.22321	.08518	-2.62063
.900	-.036	.00967	-.12440	.07993	.07834	.00561	.00151	-.01396	-.12432	.07906	-1.57257
.799	2.092	.01190	-.00971	.07736	.07231	.00573	.00105	-.01477	-.01254	.07716	-.16251
.799	4.144	.01219	.10745	.07404	.06604	.00593	.00092	-.01470	.09523	.08113	1.17379
.799	6.433	.01159	.23198	.07230	.05953	.00607	.00101	-.01440	.22332	.09783	2.27265
.799	8.596	.01080	.34235	.07434	.05433	.00632	.00071	-.01291	.32759	.12471	2.62696
.799	10.720	.01102	.45684	.07858	.04564	.00719	.00055	-.01260	.43429	.16219	2.67760
.799	12.494	.01250	.56974	.08212	.04249	.00913	-.00063	-.01062	.53247	.20613	2.59312
.799	15.112	.01256	.66432	.08617	.04411	.00677	-.00090	-.00998	.61998	.25644	2.41415
.799	17.717	.01781	.82166	.09209	.02429	.01013	-.00147	-.01346	.75467	.33777	2.23427
.799	19.310	.01956	.99143	.09455	.02842	.01056	-.00160	-.01542	.80967	.39693	2.09051
.799	21.424	.02157	.96643	.09536	.03411	.00874	-.00278	-.01490	.86491	.44178	1.95757
.799	22.416	.02151	.99099	.09676	.03075	.00798	-.00365	-.01175	.87920	.46734	1.94129

RUN NO. 89/ 0

LA48 TABULATED SOURCE DATA

LA-48 8-FT TPT 640 RI-0898/139 CR8 SPLIT ELEVON

PAGE 29

(RM1008)

PARAMETRIC DATA

BETA = .000 ELV-LO = 9.000
ELV-LI = -20.000 ELV-RI = -20.000
ELV-RO = -5.000 BDFLAP = .000
SPDRK = 25.000

RUN NO. 34/ 0

WACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.990	-2.113	.00634	-.22220	.08211	.04336	.00208	.00135	-.00998	-.21903	.09025	-2.42688
.990	.000	.01065	-.11066	.08390	.07840	.00157	.00091	-.01241	-.11066	.08390	-1.31892
.990	2.099	.01292	.00677	.08293	.06990	.00175	.00025	-.01249	.00372	.08312	.04480
.949	4.308	.01277	.14568	.08127	.06028	.00207	.00033	-.01264	.13884	.09246	1.90158
.849	6.417	.01231	.24753	.08422	.05401	.00255	.00037	-.01239	.23659	.11136	2.12453
.890	8.670	.01175	.36876	.08755	.04399	.00259	-.00005	-.01064	.35135	.14214	2.47187
.849	10.869	.01212	.48790	.09074	.03403	.00278	-.00075	-.00898	.46195	.18108	2.55104
.931	12.912	.01446	.58171	.09323	.02998	.00440	-.00125	-.00790	.54372	.22281	2.44927
.949	15.071	.01587	.67680	.09573	.03783	.00527	-.00134	-.01092	.62740	.27223	2.30485
.890	17.154	.01739	.78476	.10417	.02066	.00462	-.00129	-.01265	.71913	.33190	2.17261
.990	19.234	.02169	.88229	.10827	.01862	.00510	-.00260	-.01367	.79903	.39099	2.04107
.849	21.490	.02315	.97466	.10699	.02638	.00423	-.00333	-.01763	.86803	.45600	1.90358
.949	22.460	.02324	.99540	.10788	.03886	.00316	-.00488	-.01017	.87868	.47997	1.83068

RUN NO. 48/ 0

WACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.901	-2.182	.00707	-.21816	.09278	.04960	.00213	.00125	-.01310	-.21447	.10100	-2.12350
.901	-.007	.01099	-.09233	.09483	.07641	.00242	.00188	-.01469	-.09232	.09484	-.97340
.900	2.176	.01126	.03815	.09363	.06390	.00151	.00156	-.01431	.03457	.09501	.06383
.900	4.355	.01299	.13096	.09501	.05968	.00100	.00130	-.01468	.14331	.10620	1.34948
.901	6.524	.01229	.26949	.09798	.04984	.00121	.00086	-.01314	.23682	.12797	2.00529
.900	8.678	.01244	.39246	.10182	.03315	.00163	.00026	-.01152	.37260	.15987	2.33070
.900	10.828	.01416	.51018	.10517	.01894	.00267	-.00079	-.01203	.48134	.19914	2.41710
.900	12.996	.01638	.61336	.10808	.01729	.00468	-.00149	-.00989	.57338	.24314	2.35822
.900	15.129	.01807	.70793	.11208	.01401	.00366	-.00010	-.01392	.65405	.29294	2.23274
.900	17.306	.01844	.81703	.11496	.00995	.00298	-.00127	-.01266	.74594	.35281	2.11400
.904	19.442	.02151	.92049	.11743	.00435	.00353	-.00217	-.01302	.82892	.41712	1.98724
.900	21.594	.02611	1.00366	.11986	.01121	.00380	-.00351	-.01346	.89910	.48092	1.83912
.899	22.595	.02600	1.08935	.12000	.01700	.00265	-.00334	-.01403	.90459	.50565	1.78897

ORIGINAL PAGE IS
OF POOR QUALITY

LA-48 8-FT 1PT 600 RI-0990/139 ORB SPL17 ELEVEN

(RM1008)

PARAMETRIC DATA

BETA = .000 ELV-LO = 5.000
 ELV-LI = -20.000 ELV-RI = -20.000
 ELV-RC = -5.000 BDPLAP = .000
 SPOBRK = 25.000

RUN NO. 39/ 0

MACH	ALPHA	BETA	CM	CA	CLM	CDL	CYN	CT	CL	CD	L/D
.921	-2.164	.00170	-21376	.09991	.09291	.00241	.00234	-.01374	-.20983	.10791	-1.94430
.920	.021	.01002	-.09049	.10136	.07672	.00249	.00242	-.01563	-.09032	.10135	-.79449
.920	2.199	.01176	.04336	.10137	.06302	.00244	.00191	-.01359	.04146	.10303	.40236
.920	4.361	.01229	.15694	.10213	.09914	.00244	.00152	-.01485	.14876	.11377	1.30754
.920	6.590	.01232	.24093	.10365	.04822	.00213	.00121	-.01415	.26727	.13502	1.97949
.919	8.704	.01330	.40353	.10706	.02944	.00156	.00099	-.01290	.38264	.16649	2.29295
.920	10.993	.01446	.52339	.11094	.01433	.00249	.00010	-.01259	.49300	.20414	2.37821
.919	13.029	.01770	.63778	.11282	.00712	.00403	-.00163	-.01030	.99592	.25371	2.34485
.919	17.341	.01669	.73441	.11680	.00154	.00337	-.0026	-.01364	.67823	.30489	2.22454
.919	17.341	.01690	.84410	.11915	-.00476	.00262	-.00133	-.01256	.77023	.36332	2.10435
.920	19.511	.02282	.94578	.12163	-.01116	.00260	-.00231	-.01329	.85044	.43053	1.97629
.919	21.633	.02707	1.02225	.12399	-.00296	.00329	-.00332	-.01531	.90453	.49212	1.83902
.917	22.674	.03613	1.05191	.12448	.00632	.00204	-.00369	-.01263	.92317	.51920	1.77407

RUN NO. 29/ 0

MACH	ALPHA	BETA	CM	CA	CLM	CDL	CYN	CT	CL	CD	L/D
.930	-2.159	.00778	-21324	.11136	.10610	.00406	.00338	-.01645	-.21090	.11941	-1.76622
.931	.028	.01095	-.07786	.11303	.04363	.00342	.00319	-.01843	-.07794	.11349	-.64429
.931	2.221	.01164	.06112	.11433	.06266	.00256	.00206	-.01403	.05665	.11661	.48577
.931	4.407	.01139	.14469	.11456	.04903	.00231	.00270	-.01734	.17932	.12372	1.39317
.930	6.576	.01224	.31124	.11530	.03664	.00326	.00240	-.01719	.29594	.15018	1.97083
.930	8.753	.01160	.43799	.11755	.01811	.00287	.00143	-.01499	.41500	.18283	2.26944
.931	10.945	.01274	.57026	.11910	-.00246	.00402	.00147	-.01491	.53727	.22520	2.39571
.949	13.129	.01355	.69723	.11975	-.01275	.00326	-.00027	-.01047	.64207	.27270	2.35448
.930	15.277	.01696	.79307	.12300	-.02625	.00304	-.00120	-.01222	.73649	.32867	2.24046
.949	17.417	.01937	.89423	.12586	-.03634	.00254	-.00172	-.01130	.91555	.39778	2.10326
.930	19.603	.02609	1.01397	.13070	-.04451	.00376	-.00348	-.01194	.91135	.46331	1.96703
.931	21.789	.04463	1.10679	.13567	-.05229	.00477	-.00741	-.02014	.97735	.53679	1.82073
.930	22.759	.04971	1.13592	.13913	-.07176	.00185	-.00664	-.02373	.99560	.56315	1.76790

LA46 TABULATED SOURCE DATA

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LA-46 9-FT TPT 680 RI-0898/139 GRB SPLIT ELEWON

(RH1008)

PARAMETRIC DATA

BETA = .000 ELV-LO = 5.000
ELV-LI = -20.000 ELV-RI = -20.000
ELV-RO = -5.000 DDFLAP = .000
SPDRK = 25.000

RUN NO. 18/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CEL	CYN	CY	CL	CD	L/D
.940	-2.224	.00819	-.21279	.13127	.10922	.00406	.00320	-.01606	-.21373	.13967	-1.53026
.942	.066	.01044	-.07616	.13596	.04823	.00396	.00312	-.01772	-.07632	.13987	-.56169
.942	2.243	.01270	-.06242	.13736	.06472	.00331	.00324	-.01914	.03727	.13977	.40975
.941	4.430	.01171	.14992	.13402	.04451	.00366	.00357	-.01996	.17470	.15227	1.17333
.940	7.439	.01015	.37226	.14154	.02170	.00382	.00331	-.01431	.35040	.14855	1.46035
.940	9.044	.01077	.47164	.14479	.03488	.00314	.00292	-.01640	.44300	.21715	2.04007
.942	10.996	.01068	.59350	.14949	-.01741	.00345	.00264	-.01644	.55409	.25995	2.13151
.979	13.190	.02056	.72601	.14632	-.03417	.00336	-.00134	-.01270	.67363	.30784	2.14423
.941	15.151	.02396	.85012	.14937	-.05004	.00362	-.00179	-.01415	.74025	.36910	2.11395
.940	17.534	.01613	.99799	.15232	-.05227	.00279	-.00061	-.01144	.86121	.43107	1.99746
.940	19.757	.01554	1.06466	.15349	-.05901	.00212	-.00030	-.01219	.95011	.50434	1.44344

RUN NO. 19/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CEL	CYN	CY	CL	CD	L/D
1.079	-2.165	.00975	-.19700	.15905	.10007	.00446	.00292	-.01991	-.19045	.16634	-1.14704
1.040	-.043	.01147	-.06991	.15979	.07943	.00441	.00314	-.01809	-.06979	.15944	-.43660
1.090	2.213	.01227	.06746	.16007	.05623	.00393	.00339	-.01914	.06163	.16257	.37979
1.079	4.311	.01176	.19232	.16436	.03607	.00366	.00349	-.02031	.17982	.17437	1.00703
1.079	6.715	.01145	.33247	.16744	.01425	.00362	.00405	-.02334	.31096	.20361	1.51239
1.040	8.961	.01031	.46300	.16454	-.00731	.00302	.00322	-.01775	.43110	.23460	1.40640
1.079	10.943	.01145	.57636	.16716	-.02470	.00304	.00225	-.01554	.54377	.27542	1.97149
1.041	13.224	.01346	.71667	.16325	-.04664	.00343	.00205	-.01326	.66030	.32291	2.04443
1.042	15.390	.01590	.83432	.15956	-.05340	.00391	.00121	-.01222	.76206	.37525	2.03079
1.078	17.641	.01693	.93749	.16310	-.06041	.00234	-.00054	-.01126	.84367	.44013	1.91645

LA46 TABULATED SOURCE DATA

PAGE 32

LA-46 8-FT TPT 600 RI-0898/139 ORB SPLIT ELEVON

(RH1009)

PARAMETRIC DATA

BETA = .000 ELV-LO = 10.000
 ELV-LI = -20.000 ELV-RI = -20.000
 ELV-RO = -10.000 SDFLAP = .000
 SPOBRK = 25.000

RUN NO. 79/ 0

WICH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.799	-2.136	.00633	-.22316	.07400	.07274	.01431	.00132	-.01635	-.22224	.04234	-2.69906
.800	-.134	.01291	-.13274	.07625	.06594	.01492	.00106	-.01900	-.13256	.07656	-1.75134
.799	2.105	.01296	-.02155	.07507	.06623	.01540	.00099	-.02169	-.02429	.07423	-.32729
.799	4.061	.01335	.07501	.07535	.06376	.01654	.00094	-.02240	.06982	.07564	.92263
.794	6.300	.01349	.14254	.06137	.06420	.01794	.00079	-.02270	.17470	.04103	2.15607
.799	8.820	.01236	.30116	.04944	.06599	.01463	.00043	-.02070	.29028	.04445	3.07327
.794	10.479	.01137	.40420	.04736	.06754	.02020	.00043	-.02177	.34444	.12004	3.23422
.799	12.632	.01103	.52441	.05004	.05245	.02092	.00174	-.02177	.50116	.16364	3.06255
.794	14.439	.01243	.69222	.05315	.04464	.01995	.00045	-.02004	.61492	.21750	2.42204
.794	16.764	.01244	.73725	.06323	.04065	.01432	-.00063	-.01744	.64764	.27519	2.51724
.799	18.495	.01411	.86557	.06305	.03149	.01441	-.00144	-.01734	.79451	.33996	2.34467
.794	20.904	.01463	.97566	.06031	.03194	.01729	-.00197	-.01722	.44446	.40446	2.29030
.794	21.952	.01409	1.03919	.05937	.03243	.01346	-.00236	-.01506	.94134	.44372	2.12270

RUN NO. 69/ 0

WICH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.799	-2.136	.00928	-.23350	.04034	.04444	.01150	.00144	-.01460	-.23034	.04922	-2.54163
.801	.774	.01149	-.11634	.04247	.07756	.01160	.00142	-.01541	-.11644	.04272	-1.40770
.799	2.073	.01520	-.00673	.04156	.07032	.01214	.00100	-.01742	-.00964	.04127	-1.11910
.794	4.267	.01619	.11573	.07791	.06127	.01246	.00079	-.01424	.10961	.04631	1.27000
.799	6.442	.01531	.24407	.07593	.05941	.01354	.00150	-.01496	.23791	.10344	2.29947
.799	8.757	.01470	.36941	.07743	.04247	.01316	.00040	-.01691	.35371	.13243	2.66294
.794	11.640	.01505	.51497	.04315	.05556	.01543	.00043	-.01540	.49132	.19615	2.64043
.794	12.994	.01647	.54494	.04601	.03407	.01743	-.00076	-.01424	.55064	.21534	2.55637
.799	14.444	.01616	.66993	.04407	.03634	.01491	-.00141	-.01209	.62436	.23411	2.41946
.794	17.190	.01976	.80746	.04440	.01947	.01696	-.00146	-.01464	.74349	.32441	2.26113
.799	19.219	.02237	.89031	.04402	.02174	.01761	-.00216	-.01663	.80443	.34561	2.09632
.794	21.364	.02253	.97057	.04993	.03431	.01675	-.00262	-.01577	.85747	.44554	1.94222
.799	22.399	.02306	.99434	.10193	.04419	.01617	-.00349	-.01345	.84051	.47317	1.46047

LA48 TABULATED SOURCE DATA

LA-48 9-FT TPT 680 RI-5092/139 ORB SPLIT ELEVON

(RM1009)

PARAMETRIC DATA

BETA = .000 ELV-LO = 10.000
 ELV-LI = -20.000 ELV-RI = -20.000
 ELV-RO = -10.000 BOPLAP = .000
 SPOSRK = 25.000

RUN NO. 99/ 0

WICH	ALPHA	BETA	CN	CA	CLM	COL	CYN	CY	CL	CO	L/D
.991	-2.216	.00914	-.23373	.09407	.04426	.00755	.00141	-.01233	-.23031	.09304	-2.47537
.992	-.011	.01201	-.11062	.09643	.07749	.00790	.00106	-.01492	-.11061	.08645	-1.27946
.993	2.090	.01559	.01135	.09347	.06624	.00866	.00044	-.01562	.00022	.08622	.09335
.994	4.401	.01712	.13003	.09412	.05220	.00969	.00061	-.01746	.14313	.09534	1.50061
.995	6.876	.01536	.27926	.08648	.04219	.01095	.00074	-.01624	.26731	.11436	2.25944
.996	9.394	.01599	.42436	.09116	.03236	.01106	.00004	-.01446	.40379	.15920	2.53635
.997	10.747	.01622	.57322	.09409	.02462	.01201	-.00090	-.01349	.47653	.19710	2.54690
.998	12.940	.01487	.60501	.09765	.02054	.01467	-.00171	-.01245	.56752	.23104	2.45641
.999	15.166	.01431	.63437	.10245	.02371	.01362	-.00190	-.01274	.64324	.26092	2.24946
.990	17.371	.01972	.60143	.10752	.01607	.01293	-.00146	-.01441	.73274	.34184	2.14335
.991	19.107	.02327	.44163	.10937	.01500	.01310	-.00201	-.01363	.79725	.33214	2.03306
.992	21.406	.02481	.91772	.10944	.02164	.01220	-.00357	-.01352	.47017	.45915	1.99517
.993	22.457	.02541	1.00414	.11134	.03414	.01155	-.00512	-.00999	.40544	.40637	1.92011

RUN NO. 49/ 0

WICH	ALPHA	BETA	CN	CA	CLM	COL	CYN	CY	CL	CO	L/D
.990	-2.177	.00970	-.22543	.09579	.00344	.00719	.00215	-.01475	-.22203	.10360	-2.14347
.991	-.034	.01146	-.10397	.09680	.04324	.00741	.00263	-.01765	-.10392	.09666	-1.07505
.992	.219	.01377	-.04215	.09696	.07676	.00742	.00194	-.01771	-.00252	.09665	-.95344
.993	2.216	.01635	.04127	.09678	.06136	.00825	.00149	-.01963	.00750	.09430	.38143
.994	4.333	.01767	.17113	.09714	.04596	.01014	.00196	-.02244	.16330	.10943	1.40640
.995	6.466	.01622	.24294	.10044	.03912	.00944	.00141	-.01659	.26046	.13171	2.04439
.996	8.414	.01725	.41661	.10506	.02273	.01042	.00001	-.01495	.33359	.16764	2.33321
.997	10.939	.01940	.53534	.10414	.00779	.01233	-.00044	-.01554	.30594	.20779	2.43069
.998	13.120	.02005	.63124	.11071	.00446	.01343	-.00200	-.01234	.30041	.25111	2.34024
.999	15.295	.01794	.72694	.11335	.00646	.01019	-.00102	-.01174	.25104	.30304	2.21365
.990	17.416	.02104	.45074	.11419	-.00755	.00974	-.00234	-.01174	.76172	.36434	2.09072
.991	19.569	.02367	.93674	.12135	-.00179	.01004	-.00337	-.01074	.44199	.42410	1.96640
.992	21.041	.02444	1.01347	.12339	.00332	.01039	-.00455	-.01244	.49445	.40445	1.93344
.993	22.940	.02732	1.03042	.12323	.01146	.00945	-.00434	-.01241	.51095	.51227	1.77425

ORIGINAL PAGE IS
OF POOR QUALITY

LA46 TABULATED SOURCE DATA

PAGE 34

LA-46 8-FT TPT 640 RI-0692/139 ORB SPLIT ELEVON

(RM1009)

PARAMETRIC DATA

BETA = .000 ELV-LO = 10.000
ELV-LI = -20.000 ELV-RI = -20.000
ELV-RO = -10.000 BDFLAP = .000
SMOOR = 25.000

WACH	ALPHA	BETA	CM	CA	CLM	COL	CYN	CY	CL	CD	L/D
.920	-2.170	.0044	-22602	.10227	.10037	.00742	.00263	-.01494	-.22199	.11175	-2.00432
.920	.013	.01313	-.09945	.10335	.00071	.00791	.00269	-.01905	-.09044	.10331	-.77579
.921	2.204	.01390	.04694	.10343	.00061	.00416	.00260	-.02076	.04296	.10316	.40490
.920	4.363	.01674	.17673	.10447	.04765	.00961	.00226	-.02041	.16424	.11401	1.42565
.920	6.521	.01622	.29114	.10702	.03917	.01015	.00140	-.01744	.27714	.13440	1.94407
.920	8.715	.01676	.41553	.10947	.02484	.00949	.00050	-.01592	.39415	.17117	2.30269
.920	10.491	.01924	.54169	.11334	.00372	.01232	.00011	-.01674	.51032	.21365	2.34933
.919	13.046	.02050	.64343	.11474	.00047	.01234	-.00194	-.01164	.60130	.25717	2.33416
.921	15.213	.01732	.74512	.11945	-.00461	.00490	-.00076	-.01264	.67736	.31117	2.20937
.920	17.346	.02109	.85502	.12226	-.01540	.00476	-.00259	-.01066	.77777	.37102	2.09629
.921	19.509	.02634	.95612	.12513	-.01733	.00970	-.00342	-.01147	.85944	.43724	1.96560
.918	21.647	.02479	1.02475	.12749	-.00691	.00441	-.00433	-.01292	.90916	.49400	1.82565
.917	22.363	.02459	1.05436	.12741	-.00305	.00474	-.00409	-.01362	.92644	.51935	1.74343

RUN NO. 29/ 0

WACH	ALPHA	BETA	CM	CA	CLM	COL	CYN	CY	CL	CD	L/D
.931	-2.171	.00967	-23136	.11901	.11445	.01039	.00336	-.01792	-.22644	.12369	-1.43397
.931	.024	.01313	-.04610	.11707	.04466	.01072	.00343	-.02214	-.04615	.11704	-.73603
.931	2.215	.01635	.05644	.11722	.06371	.01051	.00307	-.02245	.05191	.11931	.43504
.990	4.407	.01624	.19500	.11812	.04362	.01124	.00320	-.02280	.14535	.13275	1.39622
.990	6.597	.01695	.31455	.11973	.03043	.01140	.00272	-.02197	.30277	.15443	1.94424
.931	8.757	.01637	.44747	.12174	.01102	.01110	.00190	-.01911	.42411	.14451	2.24076
.949	10.935	.01664	.57747	.12154	-.00933	.01212	.00102	-.01682	.54377	.22949	2.37442
.932	13.133	.01624	.69661	.12344	-.02041	.01090	-.00046	-.01094	.65034	.27433	2.33447
.949	15.271	.02104	.79749	.12555	-.02909	.00921	-.00236	-.01126	.73627	.33116	2.22332
.932	17.425	.02317	.90496	.13002	-.04421	.00799	-.00349	-.00914	.82450	.39976	2.04404
.990	19.599	.02721	1.01677	.13344	-.04417	.00430	-.00476	-.00911	.91309	.46641	1.95601
.990	21.744	.03041	1.11219	.13500	-.03564	.01064	-.00703	-.01709	.94114	.54144	1.81052
.990	22.711	.03221	1.14259	.13470	-.02273	.00773	-.00436	-.02074	1.00045	.56904	1.73401

RUN NO. 29/ 0

LA46 TABULATED YAWCE DATA

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LA-46 R-FT 101 040 R1-0495/139 ORG SPLIT ELEVON

(RM1009)

PARAMETRIC DATA

BETA = .000 ELV-LO = 10.000
 ELV-HI = -20.000 ELV-RI = -20.000
 ELV-RO = -10.000 SDFLAP = .000
 SPOBRK = 25.000

RUN NO. 19/ 0

WACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CT	CL	CD	L/D
.979	-2.196	.00032	-.27937	.13364	.11597	.01117	.00414	-.01976	-.22207	.14245	-.155893
.981	.092	.01405	-.04339	.13421	.09066	.01091	.00379	-.02241	-.07981	.13404	-.07532
.981	2.280	.01403	.05409	.14004	.06710	.01091	.00368	-.02272	.01132	.14226	.13619
.980	4.434	.01471	.19345	.14111	.04447	.01266	.00470	-.02573	.19195	.15566	1.16491
.979	6.672	.01410	.32923	.14365	.02493	.01242	.00456	-.02440	.31031	.14093	1.71506
.980	8.970	.01370	.45474	.14480	.00154	.01151	.00404	-.02307	.43627	.21444	1.99046
.982	11.151	.01445	.61074	.15373	-.02576	.01142	.00316	-.02176	.56944	.26995	2.11742
.980	13.100	.02424	.75031	.15020	-.04266	.01070	-.00110	-.01634	.67583	.31275	2.16409
.981	15.651	.02604	.87424	.15320	-.05866	.01012	-.00233	-.01427	.80654	.38337	2.00415
.980	17.715	.01925	.96453	.15521	-.09564	.00915	-.00166	-.01002	.87537	.44256	1.97799
.979	19.447	.01454	1.07754	.15623	-.06431	.00922	-.00153	-.01005	.96006	.51262	1.97245

RUN NO. 9/ 0

WACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CT	CL	CD	L/D
.979	-2.233	.01117	-.20536	.16379	.10424	.01120	.00354	-.01491	-.11905	.17094	-1.16422
.981	-.024	.01212	-.17544	.16339	.09416	.01105	.00292	-.02032	-.07541	.16342	-.46145
.980	.754	.01469	-.02690	.16402	.07373	.01074	.00342	-.02102	-.02906	.16365	-.17795
.980	2.333	.01575	.07447	.16511	.05907	.01074	.00376	-.02202	.05764	.16400	.40244
.981	4.564	.01729	.20306	.16734	.03246	.01146	.00505	-.02034	.10042	.16003	1.00019
.980	6.732	.01506	.33565	.17134	.00337	.01142	.00522	-.02529	.31424	.20352	1.49006
.980	8.466	.01222	.46501	.17235	-.01171	.01026	.00471	-.02392	.43249	.24196	1.74909
.980	11.000	.01421	.59020	.16957	-.03415	.01046	.00319	-.02016	.55539	.28147	1.97349
.982	13.102	.01876	.71690	.16425	-.09546	.01064	.00133	-.01602	.66009	.32456	2.00443
.979	15.364	.01555	.83575	.16390	-.06214	.01131	.00034	-.01094	.76214	.37047	2.00021
.977	18.047	.01941	.96516	.16675	-.06745	.00427	-.00101	-.00901	.86603	.45754	1.99240

LA48 TABULATED SOURCE DATA

PAGE 36

LA-48 8-FT TPT 680 RI-0898/139 ORB SPLIT ELEVON

(PH1010)

PARAMETRIC DATA

BETA = .000 ELV-LO = -15.000
ELV-LI = -20.000 ELV-RI = -20.000
ELV-RO = -25.000 EDPLAP = .000
SPOBRK = 25.000

RUN NO. 80/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.598	-2.107	.00251	-.32593	.07666	.12484	.00392	.00301	-.01270	-.32288	.08879	-3.63648
.600	.047	.00412	-.21782	.07961	.12024	.00372	.00255	-.01364	-.21789	.07943	-2.74302
.599	1.982	.00576	-.12165	.07857	.11620	.00352	.00218	-.01492	-.12429	.07432	-1.67245
.599	4.171	.00688	-.01000	.07336	.11290	.00346	.00166	-.01504	-.01531	.07244	-.21129
.599	6.799	.00531	.11894	.06215	.11283	.00237	.00102	-.01093	.11074	.07579	1.46113
.599	9.327	.00580	.19433	.05513	.11259	.00169	.00088	-.01117	.19430	.08269	2.22976
.599	10.927	.00489	.32335	.05201	.10297	-.00042	.00056	-.00890	.30841	.11021	2.79835
.598	12.638	.00466	.43828	.05623	.09624	-.00281	.00023	-.00766	.40756	.14901	2.73511
.598	14.646	.00527	.54019	.05629	.09425	-.00195	.00017	-.00844	.50841	.19103	2.66140
.597	16.851	.00500	.63878	.06314	.09042	-.00248	.00004	-.00773	.59305	.24560	2.41467
.598	18.726	.00615	.74401	.06411	.08783	-.00017	.00000	-.00959	.68404	.29957	2.28339
.597	20.982	.00668	.87282	.06235	.08751	.00227	.00003	-.01055	.79262	.37075	2.13789
.597	22.209	.00694	.94638	.06127	.08752	.00347	.00079	-.01123	.85301	.41445	2.05819

RUN NO. 70/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.798	-2.204	.00079	-.33904	.08436	.14021	.00365	.00408	-.01304	-.33155	.09718	-3.41172
.801	-.070	.00405	-.22059	.08649	.13174	.00386	.00352	-.01451	-.22048	.08676	-2.34126
.799	1.963	.00616	-.10748	.08494	.12364	.00357	.00298	-.01496	-.11033	.08121	-1.35859
.798	4.340	.00721	.02609	.08032	.11345	.00253	.00248	-.01450	.01993	.08207	.24287
.799	6.275	.00668	.14565	.07866	.09966	.00091	.00210	-.01286	.13717	.09422	1.45584
.799	8.281	.00721	.26498	.07881	.08510	-.00136	.00093	-.00790	.25482	.11673	2.18300
.799	10.493	.00754	.39367	.08141	.07251	-.00287	.00022	-.00814	.37226	.15174	2.45333
.799	12.915	.00900	.51953	.08473	.06568	-.00374	-.00101	-.00598	.48745	.19870	2.45314
.798	15.135	.00916	.62966	.08785	.06325	-.00457	-.00157	-.00456	.58488	.24920	2.34709
.798	17.047	.01333	.73749	.09146	.05566	-.00220	-.00177	-.00832	.67827	.30364	2.23380
.797	19.235	.01644	.83290	.09486	.05322	-.00003	-.00182	-.01156	.75515	.36397	2.07478
.798	21.493	.02003	.91457	.10007	.05229	-.00439	-.00347	-.01064	.81431	.42820	1.90170
.799	22.366	.02149	.93134	.10214	.08440	-.00521	-.00403	-.01056	.82241	.44885	1.83225

LA48 TABULATED SOURCE DATA

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LA-48 9-FT TPT 640 RI-0892/139 ORB SPLY ELEVON

(RH1010)

PARAMETRIC DATA

BETA = .000 ELV-LO = -15.000
 ELV-LI = -20.000 ELV-RI = -20.000
 ELV-RO = -25.000 PDFLAP = .000
 SPOSRK = 25.000

RUN NO. 60/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.849	-2.195	.00273	-.32790	.08726	.14456	.00213	.00302	-.01156	-.32432	.09975	-3.25122
.851	.004	.00090	-.20366	.08495	.13249	.00216	.00263	-.01333	-.20367	.08492	-2.29042
.851	2.164	.00944	-.07690	.08734	.11959	.00163	.00145	-.01413	-.08014	.08442	-.94936
.890	4.376	.00932	.06657	.08584	.10144	.00054	.00159	-.01345	.05932	.09067	.65426
.890	6.452	.00932	.19053	.08715	.08476	-.00107	.00109	-.01144	.17933	.10401	1.66214
.849	8.843	.00961	.32370	.09002	.06752	-.00276	.00024	-.00956	.30947	.13795	2.23619
.849	10.746	.01032	.44213	.09390	.05636	-.00359	-.00061	-.00771	.41674	.17494	2.39161
.890	13.164	.01141	.56619	.09737	.04602	-.00406	-.00170	-.00599	.52914	.22375	2.36447
.849	15.316	.01375	.66610	.10031	.04414	-.00436	-.00132	-.00545	.61595	.27269	2.25979
.849	17.251	.01621	.75716	.10494	.04555	-.00513	-.00161	-.00622	.64530	.32269	2.12372
.849	19.299	.02044	.83442	.10444	.05051	-.00413	-.00303	-.00559	.75545	.37954	1.99124
.890	21.363	.02403	.91449	.11229	.06439	-.00373	-.00373	-.01225	.91112	.43745	1.45251
.849	22.749	.02654	.93422	.11502	.08319	-.00469	-.00474	-.01101	.91707	.46733	1.74837

RUN NO. 50/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.901	-2.244	.00279	-.33206	.10020	.15963	.00251	.00342	-.01347	-.32749	.11313	-2.49433
.900	-.090	.00172	-.20146	.10000	.14193	.00210	.00322	-.01626	-.20170	.10632	-2.01064
.901	2.094	.01103	-.06339	.09934	.12246	.00153	.00251	-.01471	-.00696	.03637	-.59056
.900	4.323	.01067	.08167	.09447	.09997	.00043	.00201	-.01517	.07401	.10435	.70923
.900	6.534	.01037	.22359	.10149	.07921	-.00119	.00099	-.01205	.21237	.12650	1.60043
.900	8.679	.01190	.35400	.10495	.05795	-.00279	.00020	-.01053	.33411	.15715	2.12496
.899	10.820	.01243	.47494	.10749	.04137	-.00476	-.00079	-.00941	.41624	.19312	2.24701
.902	13.076	.01532	.57525	.11244	.04493	-.00597	-.00147	-.00774	.53490	.24006	2.22777
.899	15.302	.01541	.67213	.11635	.04439	-.00369	-.00124	-.00993	.61755	.24979	2.13099
.899	17.254	.01674	.77200	.11111	.03973	-.00329	-.00153	-.01142	.70199	.34249	2.04967
.899	19.396	.01975	.87342	.11111	.03463	-.00264	-.00205	-.01174	.79412	.45409	1.94045
.900	21.569	.02369	.95172	.12330	.04950	-.00199	-.00259	-.01394	.93902	.46639	1.70495
.899	22.554	.02354	.97041	.12991	.06024	-.00233	-.00224	-.01556	.94427	.48464	1.73594

ORIGINAL FOUR IS
 OF POOR QUALITY

LA-48 9-FT TPT 600 RI-0898/139 CRB SPLIT ELEVEN

(PH1010)

PARAMETRIC DATA

BETA = .000 ELV-LO = -15.000
 ELV-LI = -20.000 ELV-RI = -20.000
 ELV-RO = -25.000 BDFLAP = .000
 SPOBCK = 25.000

RUN NO. 40/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.920	-2.264	.00237	-.34100	.10739	.17105	.00216	.00426	-.01477	-.33649	.12078	-2.78595
.921	-.051	.00674	-.20564	.10769	.15164	.00228	.00352	-.01614	-.20555	.10788	-1.90541
.923	2.153	.00932	-.05908	.10601	.12716	.00149	.00246	-.01639	-.06202	.10375	-.59778
.920	4.313	.01082	.08459	.10639	.10490	.00068	.00227	-.01599	.07635	.11245	.67891
.919	6.499	.01053	.22196	.10790	.08901	-.00079	.00139	-.01303	.20832	.13233	1.57425
.920	8.690	.01246	.35357	.11093	.06196	-.00335	.00051	-.01205	.33305	.16312	2.04178
.919	10.841	.01397	.48591	.11374	.03909	-.00448	-.00044	-.01057	.45595	.20311	2.24436
.920	13.011	.01563	.58621	.11708	.03867	-.00442	-.00196	-.00751	.54480	.24605	2.21418
.920	15.188	.01545	.69772	.12123	.03203	-.00220	.00000	-.01338	.64159	.29978	2.14020
.918	17.360	.01611	.80371	.12292	.02142	-.00246	-.00111	-.01080	.75234	.35772	2.04726
.920	19.487	.01913	.91109	.12557	.01813	-.00237	-.00161	-.01210	.81757	.42250	1.93506
.919	21.619	.02408	.98184	.12775	.03138	-.00179	-.00243	-.01435	.86570	.48051	1.80165
.918	22.593	.02294	1.07234	.13066	.04540	-.00329	-.00308	-.01156	.87541	.50579	1.73078

RUN NO. 30/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.951	-2.207	.00241	-.33810	.12071	.18279	.00170	.00418	-.01452	-.33320	.13364	-2.49331
.952	-.023	.00701	-.19577	.12161	.15943	.00176	.00385	-.01724	-.19572	.12109	-1.80832
.951	2.164	.00563	-.04679	.11973	.13215	.00134	.00351	-.01833	-.05128	.11788	-.43502
.951	4.363	.01002	.10417	.11940	.10346	.00041	.00344	-.01846	.08479	.12698	.74647
.950	6.562	.01108	.24246	.12105	.08123	-.00129	.00255	-.01669	.22744	.14802	1.53649
.950	8.735	.01111	.38133	.12208	.05578	-.00271	.00139	-.01329	.33837	.17858	2.00679
.949	10.914	.01036	.51656	.12405	.03119	-.00283	.00139	-.01274	.48373	.21961	2.20271
.949	13.092	.01164	.63369	.12541	.02228	-.00227	.00025	-.01043	.58881	.26569	2.21617
.951	15.242	.01988	.75414	.12759	.00466	-.00199	-.00137	-.01234	.68407	.32136	2.15977
.951	17.434	.01795	.87331	.13030	-.01397	-.00178	-.00197	-.00930	.79415	.38596	2.05759
.950	19.611	.02117	.98404	.13293	-.01767	-.00126	-.00288	-.00934	.88234	.45549	1.93712
.950	21.790	.04407	1.07662	.13769	.00356	-.00023	-.00396	-.02050	.94959	.52750	1.70826
.951	22.697	.04604	1.09956	.13808	.01354	-.00231	-.00357	-.02363	.96112	.55166	1.74224

LA49 TABULATED SOURCE DATA

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LA-49 8-FT TPT 680 RI-0892/139 ORB SPLT ELEVON

(RH1010)

PARAMETRIC DATA

BETA = .000 ELV-LO = -15.000
ELV-LI = -20.000 ELV-RI = -20.000
ELV-RO = -25.000 DOFLAP = .000
SPDRK = 25.000

RUN NO. 20/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.979	-2.235	.00299	-.33601	.14328	.14553	.00213	.00452	-.01394	-.33017	.13624	-2.11273
.981	-.104	.00691	-.19779	.14439	.16159	.00194	.00445	-.01479	-.19753	.14475	-1.36459
.983	2.199	.00946	-.03992	.14289	.13106	.00046	.00472	-.02192	-.04537	.14126	-.32117
.985	4.245	.01063	.09755	.14405	.10537	.00017	.00421	-.02103	.04661	.15087	.57410
.987	6.351	.01036	.24626	.14710	.07967	-.00046	.00330	-.01911	.22787	.17423	1.30790
.989	8.787	.01014	.39221	.14991	.05171	-.00210	.00201	-.01415	.36471	.20806	1.75248
.991	10.941	.00915	.53058	.15317	.02304	-.00219	.00214	-.01349	.49144	.23104	1.95490
.993	13.453	.01716	.67752	.15191	.00359	-.00147	.00001	-.01392	.62358	.30337	2.04204
.995	15.331	.01909	.79564	.15314	-.01132	-.00114	-.00035	-.01450	.72631	.35999	2.01734
.997	17.564	.01213	.97711	.15661	-.01919	-.00126	.00055	-.01165	.81756	.42305	1.93256
.999	19.742	.01032	1.02161	.15612	-.02696	-.00159	.00134	-.01255	.90492	.49203	1.84710

RUN NO. 10/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
1.079	-2.299	.00535	-.30227	.17080	.16804	.00181	.00425	-.01666	-.29514	.14259	-1.61664
1.080	-.051	.00799	-.16020	.17044	.13994	.00123	.00460	-.01965	-.17062	.17062	-.93405
1.081	2.149	.01014	-.01568	.16945	.11201	.00040	.00419	-.02370	-.02203	.16914	-.13027
1.082	4.360	.01046	.12336	.17374	.04494	-.00023	.00366	-.01496	.10942	.14261	.65136
1.083	6.766	.01068	.27142	.17439	.03690	-.00074	.00320	-.01749	.24491	.20316	1.13005
1.084	8.775	.00944	.39455	.17790	.03355	-.00157	.00276	-.01557	.36279	.23690	1.53724
1.085	10.944	.00954	.53222	.17422	.00667	-.00211	.00194	-.01316	.44927	.27243	1.79595
1.086	13.229	.00977	.65031	.16907	-.00473	-.00204	.00150	-.01110	.57469	.31591	1.91471
1.087	15.409	.01005	.77371	.16423	-.01447	-.00145	.00145	-.01255	.72226	.36391	1.80379
1.088	18.036	.01232	.91702	.16670	-.03355	-.00066	.00041	-.01070	.82035	.44242	1.85423

ORIGINAL PAGE IS
OF POOR QUALITY

LAAS TABULATED SOURCE DATA

PAGE 40

LA-48 9-FT TPT 890 RI-0898/139 CRB SPL17 ELEVON

(RH1011)

PARAMETRIC DATA

BETA = .000 ELV-LO = -10.000
ELV-L1 = -20.000 ELV-R1 = -20.000
ELV-R0 = -30.000 SDFLAP = .000
SPDRK = 25.000

RUN NO. 98/ 0

WACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.000	-2.154	.00193	-.31291	.07426	.11628	.00700	.00390	-.01423	-.30990	.08999	-3.00076
.001	-.054	.00395	-.20969	.07669	.11148	.00691	.00323	-.01526	-.20981	.07689	-2.72614
.002	2.004	.00562	-.10597	.07566	.10793	.00646	.00272	-.01631	-.10456	.07190	-1.50941
.003	4.119	.00615	-.00597	.07091	.10564	.00592	.00234	-.01596	-.01094	.07030	-.15565
.004	6.234	.00573	.00781	.06224	.10679	.00457	.00199	-.01401	.09049	.07250	1.24795
.005	8.311	.00542	.20159	.05237	.10400	.00295	.00149	-.01241	.19149	.06095	2.37039
.006	10.424	.00490	.32361	.03929	.09797	.00039	.00147	-.01105	.30917	.10401	2.46232
.007	12.513	.00494	.43969	.05318	.09052	.00045	.00066	-.00933	.41772	.14719	2.93421
.008	14.620	.00531	.55147	.05593	.08612	.00266	.00092	-.01073	.52968	.19390	2.73165
.009	16.709	.00547	.65180	.06114	.08199	.00169	.00090	-.01008	.60670	.24596	2.46669
.010	18.816	.00609	.77392	.06227	.07801	.00475	.00060	-.01115	.71237	.30955	2.35879

RUN NO. 93/ 0

WACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.000	-2.237	.00186	-.32241	.08258	.13373	.00574	.00551	-.01473	-.31895	.09510	-3.35363
.001	-.071	.00097	-.20579	.08430	.12439	.00643	.00495	-.01592	-.20564	.08455	-2.43263
.002	2.055	.00449	-.09144	.08265	.11679	.00603	.00420	-.01694	-.09434	.07932	-1.18942
.003	4.232	.00611	.03232	.07863	.10446	.00492	.00361	-.01690	.02663	.08082	.32949
.004	6.359	.00507	.16156	.07694	.09497	.00219	.00293	-.01377	.15204	.09437	1.61121
.005	8.546	.00563	.29104	.07803	.08097	-.00112	.00194	-.01107	.27625	.12042	2.29415
.006	10.681	.00639	.40776	.08052	.07095	-.00307	.00079	-.00779	.39577	.15469	2.49377
.007	12.842	.00779	.51433	.08326	.06768	-.00469	.00024	-.00296	.48296	.19549	2.47749
.008	14.970	.00836	.61439	.08694	.06962	-.00692	-.00152	-.00394	.57109	.24264	2.35367
.009	17.136	.01304	.73933	.09061	.05820	-.00333	-.00167	-.00490	.67981	.30443	2.23311
.010	19.254	.01444	.83996	.09499	.05644	-.00394	-.00134	-.01133	.75789	.36533	2.07448
.011	21.373	.01403	.91603	.09935	.06914	-.00341	-.00241	-.01162	.81719	.42543	1.92044
.012	22.249	.01962	.93729	.10001	.08032	-.00384	-.00294	-.01193	.82933	.44803	1.85106

LA46 TABULATED SOURCE DATA

LA-46 8-FT IPT 640 RI-D892/139 CRB SPL17 ELEVEN

(RH1011)

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PARAMETRIC DATA

BETA = .000 ELV-LO = -10.000
 ELV-LI = -20.000 ELV-RI = -20.000
 ELV-RO = -30.000 90FLAP = .000
 SPOBRK = 25.000

RUN NO. 92/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CPL	CYN	CY	CL	CD	L/D
.90	-2.249	.00012	-.31794	.08666	.13951	.00912	.00319	-.01370	-.31429	.09907	-3.17248
.90	-.079	.00460	-.19719	.08830	.12863	.00780	.00453	-.01178	-.19707	.08857	-2.22507
.91	2.099	.00449	-.06908	.08673	.11558	.00690	.00351	-.01826	-.07221	.08414	-.85820
.91	4.258	.00552	.06338	.08520	.09849	.00476	.00274	-.01702	.05688	.08967	.63428
.92	6.432	.00910	.20792	.08681	.08149	.00162	.00193	-.01418	.18993	.10877	1.74805
.93	8.591	.00969	.32557	.08898	.06634	-.00119	.00078	-.01126	.30862	.13662	2.25903
.94	10.737	.01232	.44355	.09259	.05572	-.00424	-.00072	-.00926	.41853	.17360	2.41083
.95	12.803	.01291	.54655	.09549	.05125	-.00596	-.00133	-.00706	.51142	.21534	2.37498
.96	15.736	.01498	.64295	.09993	.04953	-.00685	-.00238	-.00595	.59502	.26330	2.25980
.97	17.171	.01652	.74538	.10445	.04726	-.00559	-.00262	-.00797	.68122	.32007	2.12835
.98	19.337	.02095	.84867	.10642	.04426	-.00406	-.00273	-.01196	.76561	.38134	2.00770
.99	21.452	.02408	.92700	.10957	.03926	-.00327	-.00287	-.01489	.82271	.44101	1.86552
.99	22.374	.02443	.94166	.11163	.03228	-.00340	-.00372	-.01284	.82827	.46168	1.79406

RUN NO. 89/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CPL	CYN	CY	CL	CD	L/D
.901	-2.243	.00077	-.32979	.10019	.15773	.00790	.00600	-.01872	-.32562	.11302	-2.88105
.901	-.042	.00530	-.19559	.10028	.14033	.00737	.00503	-.01962	-.19551	.10042	-1.94691
.902	2.110	.00811	-.05718	.09958	.12016	.00590	.00438	-.00705	-.06081	.09741	-.00023
.903	4.315	.01025	.08435	.09841	.09861	.00403	.00318	-.01834	.07670	.10448	.73414
.901	6.504	.01038	.22551	.10129	.07895	.00101	.00194	-.01473	.21258	.12618	1.58468
.901	8.654	.01259	.15589	.10555	.05867	-.00335	.00040	-.01205	.33595	.15790	2.12762
.903	10.826	.01371	.41115	.10688	.04457	-.00475	-.00070	-.00991	.44662	.19422	2.29950
.901	12.995	.01551	.57566	.11037	.04446	-.00555	-.00119	-.01070	.53659	.23711	2.26307
.901	15.157	.01556	.67908	.11366	.04121	-.00417	-.00059	-.01196	.62377	.28673	2.17545
.903	17.278	.01632	.78233	.11660	.03820	-.00262	-.00125	-.01103	.71239	.34369	2.07275
.901	19.408	.01985	.89227	.11905	.03175	-.00115	-.00197	-.01234	.80158	.40961	1.95692
.901	21.675	.02432	.95031	.12272	.04448	-.00063	-.00189	-.01561	.84728	.46754	1.81220
.903	22.495	.02418	.97629	.12305	.03410	-.00060	-.00144	-.01804	.85493	.48721	1.75475

LA-48 8-FT TPT 680 RI-0892/139 CRB SPLIT ELEVON

(RH1011)

PARAMETRIC DATA

BETA = .000 ELV-LO = -10.000
 ELV-LI = -20.000 ELV-RI = -20.000
 ELV-RO = -30.000 SDFLAP = .000
 SPODRK = 25.000

RUN NO. 88/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.920	-2.246	.00054	-.33079	.10708	.16359	.00890	.00699	-.02144	-.32564	.11993	-2.71529
.922	-.051	.00392	-.19446	.10430	.14718	.00877	.00591	-.02259	-.19437	.10847	-1.79188
.920	2.136	.00991	-.09034	.10549	.12192	.00727	.00490	-.02300	-.05444	.10354	-.32582
.919	4.344	.01094	.09895	.10613	.09988	.00493	.00405	-.02134	.08863	.11317	.78323
.920	6.513	.01144	.22671	.10795	.08330	.00680	.00253	-.01722	.21301	.13287	1.60312
.919	8.687	.01284	.36109	.11004	.09556	-.00263	.00796	-.01375	.34033	.16331	2.08388
.920	10.849	.01458	.48786	.11246	.08140	-.00416	-.00921	-.01177	.45797	.20227	2.26414
.919	13.008	.01554	.59441	.11376	.03556	-.00370	-.00133	-.00945	.55335	.24463	2.26275
.921	15.189	.01561	.70949	.11843	.02692	-.00166	.00728	-.01434	.65368	.30019	2.17762
.919	17.328	.01593	.81572	.12103	.01651	-.00153	-.00164	-.01073	.74265	.39850	2.07156
.919	19.507	.01715	.91548	.12339	.01591	-.00791	-.00144	-.01087	.82173	.42201	1.94717
.919	21.646	.02340	.98993	.12596	.02775	-.00034	-.00194	-.01522	.87366	.48223	1.81169
.919	22.554	.02289	1.00615	.12894	.04130	-.00169	-.00251	-.01320	.87974	.50570	1.74206

RUN NO. 89/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.950	-2.232	.00076	-.34070	.11186	.18224	.00707	.00711	-.02196	-.33569	.13904	-2.48598
.932	-.042	.00344	-.20100	.12285	.19531	.00727	.00657	-.02412	-.20091	.12299	-1.63353
.951	2.159	.00435	-.04776	.12017	.12995	.00592	.00635	-.02584	-.05223	.11829	-.44172
.950	4.367	.00990	.10141	.11964	.10290	.00388	.00572	-.02324	.09201	.12701	.72440
.950	6.560	.01107	.24384	.12081	.07909	.00176	.00403	-.02113	.22844	.14787	1.54405
.931	8.737	.01212	.38495	.12228	.05251	-.00073	.00252	-.01749	.36131	.17933	2.01817
.931	10.902	.01189	.51864	.12238	.02700	-.00184	.00171	-.01493	.48613	.21827	2.22724
.950	13.102	.01275	.63701	.12286	.01930	-.00136	.00078	-.01285	.59237	.26406	2.24405
.931	15.268	.02400	.75990	.12623	.00248	-.00046	-.00091	-.01120	.69884	.32189	2.17419
.950	17.429	.01742	.87375	.12887	-.01659	-.00038	-.00120	-.00953	.79573	.38465	2.06586
.931	19.591	.01969	.98764	.13242	-.02099	.00032	-.00252	-.00933	.88676	.45591	1.94351
.931	21.777	.04339	1.07826	.13740	-.07041	.00218	-.00318	-.02222	.95034	.52762	1.80117
.933	22.719	.04448	1.10411	.13798	-.08845	-.00019	-.00457	-.02321	.96517	.53367	1.74321

LA40 TABULATED SOURCE DATA

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LA-40 8-FT TPT 640 RI-0898/139 CRB SPLIT ELEVON

(RH1011)

PARAMETRIC DATA

BETA = .000 ELV-LO = -10.000
 ELV-LI = -20.000 ELV-RI = -20.000
 ELV-RO = -30.000 BDFLAP = .000
 SPOBRK = 25.000

RUN NO. 84/ 0

MACI	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.979	-2.216	.00150	-.32022	.14077	.17345	.00909	.00459	-.02699	-.31454	.13304	-2.05522
.980	-.004	.00387	-.17344	.14124	.14952	.00453	.00492	-.02943	-.17343	.14125	-1.22746
.980	2.183	.00790	-.02838	.14057	.12263	.00662	.00460	-.03159	-.03371	.13939	-.24147
.980	4.391	.00823	-.11602	.14146	.09583	.00474	.00751	-.02907	.10444	.14990	.69963
.979	6.596	.00827	.25414	.14244	.07203	.00267	.00557	-.02329	.24002	.17155	1.39918
.980	8.779	.00878	.40059	.14668	.04443	.00037	.00410	-.01971	.37351	.20609	1.81232
.979	10.969	.01112	.54530	.14734	.01498	-.00065	.00234	-.01597	.50730	.24841	2.04221
.980	13.145	.01545	.67045	.15046	-.00043	.00107	.00152	-.01734	.61905	.29908	2.06392
.979	15.332	.02063	.79480	.14970	-.01376	.00173	.00334	-.01801	.73079	.35559	2.05513
.979	17.504	.02739	.90912	.15398	-.02216	.00085	.00155	-.01324	.82764	.42035	1.94239
.980	19.667	.02943	1.02303	.15629	-.03033	.00067	.00224	-.01377	.91075	.49144	1.85307
.974	21.878	.02991	1.12736	.15614	-.02646	-.00006	.00131	-.01235	.94794	.56502	1.74854
.976	22.794	.01016	1.15655	.15412	-.01772	-.00016	.00153	-.01332	1.00644	.59022	1.70525

RUN NO. 81/ 0

MACI	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.001	-2.194	-.00422	-.24711	.16737	.15757	.00415	.00975	-.02621	-.24047	.17426	-1.57336
.001	-.003	.00001	-.14949	.16710	.13377	.00738	.00956	-.02471	-.14944	.16711	-.89444
.000	2.203	.00309	-.00557	.16426	.10547	.00541	.00703	-.02034	-.01204	.16792	-.07164
.000	4.430	.00412	.13335	.17239	.07466	.00376	.00796	-.02694	.12163	.14233	.66710
.000	6.604	.00442	.24927	.17406	.05325	.00241	.00943	-.02377	.24747	.20344	1.21379
.000	8.793	.00304	.40611	.17397	.02660	.00082	.00575	-.02021	.37470	.23394	1.67207
.000	11.006	.00002	.54524	.16996	.00744	-.00073	.00424	-.01061	.50276	.20003	1.05570
.000	13.201	.00463	.66611	.16533	-.01351	-.00041	.00376	-.01474	.61071	.31324	1.04941
.001	15.402	.00445	.78181	.16248	-.02412	.00134	.00394	-.01590	.71034	.36426	1.05077
.002	17.547	.00431	.89391	.16390	-.03477	.00162	.00144	-.01200	.80260	.42634	1.04234

LA-48 8-FT TPT 640 RI-0999/139 CRB SPLIT ELEVON

(RH1012)

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
 ELV-LI = -10.000 ELV-RI = -10.000
 ELV-RO = -20.000 SDFLAP = .000
 SPOBRK = 25.000

RUN NO. 93/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.001	-2.097	.00419	-.14677	.06266	.03640	.00714	.00220	-.01262	-.14433	.06945	-2.63447
.002	.003	.00630	-.01794	.06432	.03504	.00700	.00212	-.01547	-.04794	.06432	-1.36369
.003	2.041	.00722	.00939	.06323	.03365	.00674	.00147	-.01607	.00704	.06332	.11145
.004	4.194	.00771	.11227	.05406	.03245	.00747	.00164	-.01627	.10772	.06611	1.62929
.005	6.292	.00774	.21774	.04446	.03257	.00773	.00134	-.01594	.21104	.07243	2.91419
.006	8.365	.00721	.31416	.03406	.03300	.00713	.00133	-.01456	.30926	.04394	3.64414
.007	10.474	.00594	.43437	.04033	.04221	.00930	.00216	-.01511	.42373	.11935	3.59034
.008	12.569	.00732	.54946	.04442	.03506	.01013	.00116	-.01437	.52597	.16319	3.22301
.009	14.679	.00717	.67729	.04636	.02600	.01144	.00794	-.01364	.64344	.21644	2.97233
.010	16.756	.00411	.74144	.05466	.01434	.01044	.00723	-.01294	.73244	.27774	2.63473
.011	18.465	.0102	.90767	.05421	.01074	.01174	-.00034	-.01467	.94139	.34474	2.44035

RUN NO. 94/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.001	-2.150	.00444	-.19164	.06754	.03363	.00792	.00336	-.01503	-.14901	.07472	-2.52934
.002	-.006	.00594	-.04196	.06931	.03922	.00693	.00329	-.01567	-.04196	.06932	-1.17494
.003	2.114	.00619	.02491	.06413	.03316	.00677	.00266	-.01696	.02234	.06901	.32425
.004	4.242	.00691	.14724	.06474	.04467	.00672	.00261	-.01754	.14203	.07560	1.47447
.005	6.451	.00932	.26592	.06433	.03496	.00701	.00193	-.01513	.25699	.09400	2.73393
.006	8.573	.00934	.37434	.06644	.03142	.00666	.00129	-.01315	.36415	.12253	2.97190
.007	10.722	.00737	.44294	.07112	.02427	.00624	.00112	-.01227	.46124	.15073	2.47247
.008	12.453	.00911	.54232	.07454	.02514	.00637	.00064	-.01045	.55114	.20225	2.72501
.009	15.076	.01021	.60090	.07942	.02239	.00623	.00016	-.01079	.64677	.25560	2.53036
.010	17.161	.01562	.42736	.04437	.00767	.01030	-.00049	-.01449	.76537	.32492	2.35615
.011	19.249	.01614	.92294	.04799	.00423	.00790	-.00066	-.01472	.94210	.34793	2.17473

LAAS TABULATED SOURCE DATA

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LA-4A 9-FT TPT 640 RI-0998/139 CP2 SPLIT ELEVON (RH1012)

PARAMETRIC DATA

BETA = .000 ELV-L0 = .000
 ELV-L1 = -10.000 ELV-R1 = -10.000
 ELV-P0 = -20.000 DOFLAP = .000
 SPODERK = 25.000

RUN NO. 91/ 0

MAOH	ALPHA	BETA	CN	CA	CLM	CEL	CYN	CY	CL	CD	L/D
.90	-2.162	.00599	-20290	.07240	.07407	.00794	.00365	-.01554	-.19961	.04034	-2.49325
.90	-2.162	.00729	-104406	.07473	.06620	.00726	.00325	-.01639	-.04405	.07473	-1.12449
.90	2.151	.01027	.03545	.07417	.05724	.00603	.00239	-.01651	.03265	.07545	.43267
.90	4.322	.01123	.16412	.07373	.04519	.00333	.00199	-.01620	.15409	.04549	1.40771
.49	6.441	.01029	.29334	.07791	.03314	-.00090	.00096	-.01229	.27274	.10940	2.49312
.49	8.614	.00974	.39115	.08196	.02844	-.00203	.00021	-.00957	.37447	.13956	2.69324
.90	10.737	.01041	.44720	.08690	.02665	-.00101	-.00060	-.00754	.46242	.17630	2.62202
.49	12.806	.01116	.59629	.09454	.02294	.00006	-.00026	-.00964	.55170	.21725	2.53949
.49	15.069	.01344	.69344	.09321	.02020	.00550	-.00020	-.01207	.64541	.27030	2.34774
.49	17.221	.01541	.80454	.09771	.00997	.00616	-.00106	-.01149	.74337	.33270	2.23432
.49	19.374	.01754	.92047	.09941	.00426	.00764	-.00121	-.01330	.83521	.39356	2.09731
.90	21.499	.01973	1.01124	.10203	.00934	.00664	-.00221	-.01165	.90352	.46555	1.94077
.90	22.419	.01713	1.02274	.11311	.02367	.00404	-.00412	-.00435	.90612	.49536	1.66692

RUN NO. 92/ 0

MAOH	ALPHA	BETA	CN	CA	CLM	CEL	CYN	CY	CL	CD	L/D
.90	-2.169	.00530	-114394	.04530	.07137	.01074	.00369	-.02164	-.14062	.09220	-1.95910
.90	.006	.00922	-.05635	.04779	.05664	.00996	.00321	-.02350	-.05636	.04774	-.64194
.90	2.209	.01094	.07632	.04762	.04204	.00413	.00459	-.02312	.07244	.09050	.00535
.90	4.363	.01054	.14725	.04935	.03864	.00062	.00264	-.01707	.17990	.10334	1.74096
.90	6.415	.01059	.30155	.05145	.02702	-.00243	.00149	-.01357	.20323	.12905	2.31271
.90	8.664	.01062	.44472	.05332	.01454	-.00193	.00094	-.01125	.34769	.15573	2.49392
.90	10.451	.01072	.55946	.05457	.01143	.00153	.00104	-.01143	.49162	.19459	2.52037
.90	13.013	.01190	.62461	.10141	.00447	.00416	.00035	-.01149	.51373	.23945	2.44615
.90	15.171	.01294	.74267	.10573	-.00444	.00510	.00099	-.01443	.64912	.29640	2.32492
.49	17.317	.01420	.85375	.10404	-.01519	.00460	-.00066	-.01072	.74206	.35730	2.19105
.49	19.474	.01477	.95494	.11025	-.01614	.00564	-.00144	-.01273	.86730	.42370	2.04694
.49	21.624	.01220	1.03944	.11419	-.00795	.00473	-.00264	-.01224	.92325	.49449	1.84446
.90	22.533	.02136	1.05723	.11454	.00102	.00334	-.00263	-.01145	.93263	.51095	1.62530

LA449 TABULATED SOURCE DATA

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LA-49 8-FT TPT 640 RI-0898/139 C08 SPL17 E10V0N

(RM1012)

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
ELV-L1 = -10.000 ELV-R1 = -10.000
ELV-RO = -20.000 BDFLAP = .000
SPOERK = 25.000

RUN NO. 87/ 0

WACH	ALPHA	BETA	CN	CA	CLM	CSL	CYN	CT	CL	CD	L/D
.920	-2.149	.00601	-1.19126	.09383	.04054	.00948	.00565	-.02199	-.14761	.10093	-1.45870
.919	.017	.00480	-.03223	.09352	.03915	.00456	.00553	-.02395	-.05225	.09551	-.54712
.920	2.221	.01099	.04159	.09347	.04155	.00613	.00455	-.02252	.07783	.09556	.74964
.919	4.343	.01115	.19821	.09605	.03649	-.00043	.00222	-.01870	.14429	.11977	1.69944
.919	6.344	.01065	.30410	.09777	.02759	-.00241	.00149	-.01344	.29495	.13226	2.23001
.920	8.706	.00919	.41636	.10127	.01431	-.00067	.00154	-.01239	.39624	.16313	2.42901
.920	10.473	.01079	.33523	.10406	.00533	.00132	.00102	-.01225	.50599	.20316	2.49061
.919	13.041	.01478	.64604	.10753	-.00622	.00427	-.00223	-.00597	.60599	.25072	2.41660
.920	15.212	.01263	.77374	.11027	-.01917	.00342	.00701	-.01094	.71770	.30942	2.31946
.919	17.361	.01674	.84954	.11252	-.03394	.00309	-.00160	-.00991	.81544	.37242	2.14725
.921	19.356	.01954	.96204	.11400	-.03557	.00371	-.00203	-.01124	.89643	.44025	2.03619
.919	21.654	.02336	1.03670	.11771	-.02144	.00494	-.00144	-.01534	.93466	.49939	1.47962
.917	22.543	.02151	1.04006	.12024	-.00960	.00191	-.00321	-.00946	.95106	.52343	1.40467

RUN NO. 86/ 0

WACH	ALPHA	BETA	CN	CA	CLM	CSL	CYN	CT	CL	CD	L/D
.930	-2.135	.00331	-1.14666	.10704	.04704	.00914	.00605	-.02046	-.14254	.11396	-1.60183
.931	.024	.00731	-.09331	.10974	.06347	.00797	.00564	-.02299	-.09037	.10971	-.45906
.931	2.240	.00390	.00924	.10947	.04141	.00705	.00349	-.02451	.09492	.11324	.74964
.930	4.407	.00952	.21493	.10929	.02670	.00242	.00413	-.02015	.20944	.12379	1.69436
.931	6.599	.00915	.33564	.10931	.01462	.00110	.00253	-.01505	.32046	.14716	2.15034
.930	8.765	.00475	.46193	.11029	-.00312	.00240	.00149	-.01245	.43973	.17939	2.45122
.930	10.724	.00494	.59260	.11132	-.02035	.00264	.00174	-.01274	.55094	.21971	2.50754
.949	13.111	.01339	.70796	.11213	-.02929	.00345	-.00017	-.01063	.65725	.26422	2.45744
.932	15.296	.01409	.83766	.11748	-.03557	.00330	-.00077	-.01334	.77699	.33430	2.32421
.931	17.469	.01433	.99907	.11973	-.07546	.00234	-.00221	-.00491	.87490	.40210	2.15576
.949	19.620	.02220	1.03975	.12172	-.07140	.00291	-.00394	-.00717	.95293	.46491	2.03220
.930	21.426	.04420	1.14379	.12764	-.04956	.00630	-.00671	-.02149	1.01434	.54375	1.46546
.930	22.717	.04615	1.19975	.12932	-.03375	.00164	-.00731	-.01457	1.01976	.56734	1.79746

LA46 TABULATED SOURCE DATA

LA-46 8-FT TP 640 RI-0398/139 C80 SPLIT ELEVON

(RH10.2)

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
ELV-LI = -10.000 ELV-RI = -10.000
ELV-RO = -20.000 SDFLAP = .000
SPDRK = 25.000

MACH	ALPHA	BETA	CN	CA	CLM	CB	CYN	CY	CL	CD	L/D
.976	-2.145	.00105	-1.9175	.12398	.09394	.00918	.00748	-.02329	-.14695	.13107	-1.42631
.981	.054	.00437	-.03540	.12951	.07106	.00791	.00757	-.02633	-.05552	.12945	-.42886
.986	2.249	.00572	.04301	.12451	.04914	.00704	.00747	-.02695	.07791	.13167	.99167
.990	4.430	.00632	.21745	.12794	.02993	.00435	.00823	-.02372	.20693	.14426	1.43445
.993	6.815	.00746	.34374	.13096	.01149	.00211	.00424	-.01895	.32634	.16967	1.92357
.995	6.796	.00742	.47574	.13359	-.01124	.00351	.00319	-.01544	.44971	.20477	2.19619
.998	10.998	.01029	.60571	.13513	-.03149	.00351	.00273	-.01436	.56481	.24820	2.29174
.991	13.154	.01569	.73953	.13935	-.03282	.00417	.00590	-.01539	.64439	.30403	2.26423
.991	15.369	.01477	.87252	.14354	-.06724	.00359	-.00920	-.01469	.80327	.36984	2.17511
.999	17.315	.01241	.94431	.14435	-.07701	.00205	.00024	-.01145	.89517	.43409	2.36220
.990	19.725	.01161	1.10462	.14692	-.04663	.00244	.00013	-.01009	.94954	.51299	1.92496
.976	21.447	.01440	1.19350	.14527	-.03351	.00244	-.00021	-.01164	1.03245	.57952	1.81674

MACH	ALPHA	BETA	CN	CA	CLM	CB	CYN	CY	CL	CD	L/D
.981	-2.122	-.00017	-.15354	.14642	.07104	.00440	.00792	-.02567	-.14401	.15201	-.97369
1.041	.063	.00364	-.02595	.14712	.03177	.00796	.00779	-.02603	-.02611	.14709	-.17751
1.040	2.267	.00476	.15425	.14934	.02941	.00765	.00769	-.02654	.1034	.15338	.67235
1.040	4.470	.00559	.23931	.15193	.07674	.00324	.00667	-.02412	.22674	.17714	1.33267
1.041	6.899	.00562	.36051	.15224	-.01000	.00334	.00934	-.01924	.34543	.19302	1.76364
1.040	8.424	.00756	.44257	.15413	-.02949	.00410	.00344	-.01724	.45322	.22633	2.07243
1.040	11.019	.00704	.561	.15321	-.04907	.00439	.00372	-.01430	.56516	.26614	2.12356
1.041	13.234	.00419	.73296	.15271	-.06037	.00419	.00275	-.01439	.67454	.31645	2.14421
1.041	15.444	.00222	.85101	.15334	-.07207	.00462	.00243	-.01427	.77934	.37465	2.04030
1.040	17.623	.01244	.96476	.15756	-.08188	.00312	.00032	-.01053	.87174	.44224	1.97127
1.074	19.413	.01457	1.00171	.16225	-.09429	.00363	-.00004	-.01124	.97209	.52267	1.89946

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OF POOR QUALITY

LA-48 3-FT TPT 680 RI-0498/139 CRD SPLIT ELEVON

TH010131

PARAMETRIC DATA

BETA = .000 ELV-LO = -10.000
 ELV-HI = .000 ELV-RI = .000
 ELV-RO = -10.000 DOFLAP = .000
 SPODBK = 25.000

TURN NO. 37/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.600	-2.045	.00487	-.09740	.06291	.01455	-.00690	-.00056	-.00539	-.09510	.06624	-1.43557
.601	.030	.00669	-.07430	.06450	.01354	-.00636	-.00092	-.00719	-.06433	.05450	-.06716
.601	2.130	.00725	.09415	.06260	.01325	-.00690	-.00145	-.00613	.09176	.06606	1.39909
.600	4.220	.00795	.19303	.03699	.01265	-.00729	-.00179	-.00820	.19992	.07009	2.66122
.600	6.309	.00754	.30291	.04792	.01094	-.00929	-.00224	-.00399	.29590	.08092	3.65549
.600	8.411	.00640	.41626	.03732	.00922	-.00999	-.00243	-.00207	.40632	.09780	4.15439
.600	10.517	.00595	.52672	.04814	-.00676	-.00776	-.00191	-.00174	.50909	.14348	3.34824
.600	12.599	.00492	.64519	.05075	-.01193	-.00939	-.00763	-.00763	.61959	.19024	3.25160
.600	14.714	.00530	.77147	.05239	-.02479	-.00969	-.00236	-.00297	.73297	.24662	2.97163
.600	16.809	.00434	.89581	.06010	-.03602	-.00944	-.00222	-.00794	.83154	.31399	2.64835
.601	18.924	.00646	1.01471	.05562	-.04241	-.00695	-.00220	-.00326	.94095	.39453	2.44673

LA-48 8-FT TPT 680 RI-0498/139 CRD SPLIT ELEVON

TH010141

PARAMETRIC DATA

BETA = .000 ELV-LO = -20.000
 ELV-HI = .000 ELV-RI = .000
 ELV-RO = -20.000 DOFLAP = .000
 SPODBK = 25.000

TURN NO. 99/ 0

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.600	-2.077	.00339	-.14433	.06634	.01714	.00720	-.00110	-.00448	-.14193	.07153	-1.94277
.601	.024	.00710	-.04262	.06924	.01424	-.00677	-.00141	-.00901	-.04265	.06922	-.62515
.600	2.112	.00934	.05392	.06663	.03275	-.00640	-.00190	-.00793	.05143	.06937	.75004
.600	4.193	.00924	.15310	.07057	.03207	-.00592	-.00193	-.00753	.14123	.07200	2.05076
.600	6.300	.00941	.29920	.05195	.03279	-.00565	-.00232	-.00590	.25094	.07997	3.13796
.600	8.399	.00902	.36960	.04156	.03243	-.00593	-.00233	-.00590	.33940	.09496	3.77930
.600	10.476	.00995	.48090	.05177	.01431	-.00196	-.00122	-.00909	.46297	.13926	3.34939
.600	12.591	.00576	.59682	.05592	.01216	-.00312	-.00237	-.00793	.56035	.19236	3.07274
.600	14.704	.00906	.70515	.05662	.00993	-.00795	-.00270	-.00796	.66769	.23375	2.93635
.600	16.737	.00621	.81746	.06265	-.00779	-.00779	-.00270	-.00779	.76469	.29569	2.59622
.601	18.990	.00739	.94974	.05999	-.01143	-.00621	-.00299	-.00297	.87922	.36391	2.41327

LA49 TABULATED SOURCE DATA

LA-48 9-FT TPT 680 RI-0898/139 CRB SPLIT ELEVON

(RH1015)

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PARAMETRIC DATA

BETA = .000 ELV-LO = -30.000
 ELV-LI = .000 ELV-RI = .000
 ELV-RO = -30.000 DDFLAG = .000
 SPOOR = 25.000

RUN NO. 99/ 0

WACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
.599	-2.102	.00652	-.19817	.07439	.05155	-.00730	-.00176	-.00418	-.19331	.04161	-2.39329
.602	-.010	.00403	-.09248	.07620	.03645	-.00725	-.00201	-.00555	-.09246	.07622	-1.21311
.601	2.092	.00911	.01231	.07405	.05195	-.00700	-.00233	-.00620	.00960	.07445	.12436
.602	4.188	.00969	.11793	.06874	.04974	-.00710	-.00264	-.00608	.11260	.07717	1.45907
.601	6.306	.00915	.22955	.05921	.04603	-.00743	-.00277	-.00351	.22066	.08395	2.62446
.600	8.375	.00732	.34175	.04974	.04157	-.00719	-.00260	-.00292	.33746	.09499	3.34269
.599	10.490	.00657	.48983	.05421	.03106	-.00534	-.00205	-.00353	.47079	.14230	3.30051
.600	12.493	.00523	.59169	.05844	.00949	-.00420	-.00211	-.00299	.60374	.15003	3.33567
.599	14.674	.00613	.69365	.06254	.00097	-.00473	-.00213	-.00279	.65131	.23520	2.76916
.600	16.761	.00630	.80009	.06763	.00332	-.00499	-.00225	-.00216	.74691	.23549	2.72072
.600	18.872	.00727	.91216	.06516	.00333	-.00441	-.00239	-.00262	.84177	.35712	2.35430

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